TECHNICAL MEMORANDUM

X-658

EFFECTS OF OFF-DESIGN INLET MASS FLOW UPON STATIC STABILITY OF A DELTA WINGED CONFIGURATION WITH A CANARD CONTROL AND PYLON-MOUNTED NACELLES FOR MACH NUMBERS FROM 0.65 TO 3.50

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SUMMARY

The model tested had four podded engines mounted beneath the aspect ratio 2.17 wing. Several arrangements of nacelle locations were tested. To determine effects of off-design inlet mass flow upon static stability the nacelles were either partially blocked or plugged. The Mach numbers of the investigation were from 0.65 to 3.5 with Reynolds numbers of about 4×6^6 based on mean aerodynamic chord. Results were obtained at angles of attack and sideslip from -6° to $+8^\circ$.

The results indicate large increments in yawing moment for a blocked outboard nacelle and large increments in rolling moment for a blocked inboard nacelle at Mach numbers above 2.0. At Mach number 1.0 significant changes in longitudinal static margin occurred. Interference effects were found to be a function of nacelle placement, angles of attack and sideslip, Mach number, and inlet mass-flow ratio.

Author

INTRODUCTION

One problem in the use of podded engines mounted on the wing of supersonic aircraft is the effect of engine flame-out upon stability. In addition to yawing moments due to asymmetric thrust, the inlet and exit flow fields generated by the sudden reduction of mass flow through the flamed-out engine may be destabilizing and result in serious aerodynamic control and trim problems. The results of references 1 and 2 indicate that at about M = 2.0, interference effects resulting from reduced mass flow could produce adverse yawing and rolling moments. Further, it was found for the conditions of engine flame-out that the placement of nacelles beneath a wing could influence the control and trim problems. The present investigation was conducted, therefore, to determine

* Title, Unclassified

the effects of reduced inlet mass flow upon static stability of a supersonic aircraft configuration with various nacelle locations.

The configuration chosen for study employed pylon-mounted podded engines since this type of engine installation appears to present the most severe aerodynamic control problem for an engine-out condition. The nacelles were located to minimize fuselage-wing juncture and wing shock-wave interference with the inlets for Mach numbers above 1.5. Adjacent nacelle inlet flame-out interferences were also considered.

SYMBOLS

The system of stability axes and the positive direction of forces, moments, and angles are shown in figure 1.

b wing span

$\bar{c}$ mean aerodynamic chord

C_D drag coefficient, $\frac{\text{drag}}{q_\infty S}$

$C_{D_{b_F}}$ fuselage base drag coefficient, $\frac{\text{base drag}}{q_\infty S}$

$C_{D_{b_I}}$ inboard nacelle base drag coefficient, $\frac{\text{base drag}}{q_\infty S}$

$C_{D_{b_O}}$ outboard nacelle base drag coefficient, $\frac{\text{base drag}}{q_\infty S}$

C_{D_o} drag coefficient at zero lift

ΔC_{D_o} incremental drag coefficient at zero lift, C_{D_o} reduced mass flow $- C_{D_o}$ open nacelles

C_L lift coefficient, $\frac{\text{lift}}{q_\infty S}$

C_l rolling-moment coefficient, $\frac{\text{rolling moment}}{q_\infty S b}$

ΔC_l incremental rolling-moment coefficient determined at $\beta = 0^\circ$, $C_{l_{\text{reduced mass flow}}} - C_{l_{\text{open nacelles}}}$

$\frac{\partial C_l}{\partial \beta}$ effective dihedral derivative

C_m pitching-moment coefficient, $\frac{\text{pitching moment}}{q_\infty S \bar{c}}$

C_{m_o} pitching-moment coefficient at zero lift

ΔC_{m_o} incremental pitching-moment coefficient at zero lift, $C_{m_{o_{\text{reduced mass flow}}}} - C_{m_{o_{\text{open nacelles}}}}$

$\frac{\partial C_m}{\partial C_L}$ longitudinal static margin determined at zero lift

$\Delta \frac{\partial C_m}{\partial C_L}$ incremental longitudinal static margin at zero lift, $\frac{\partial C_m}{\partial C_{L_{\text{reduced mass flow}}}} - \frac{\partial C_m}{\partial C_{L_{\text{open nacelles}}}}$

C_n yawing-moment coefficient, $\frac{\text{yawing moment}}{q_\infty S b}$

ΔC_n incremental yawing-moment coefficient determined at $\beta = 0^\circ$, $C_{n_{\text{reduced mass flow}}} - C_{n_{\text{open nacelles}}}$

$\frac{\partial C_n}{\partial \beta}$ directional stability derivative

C_Y side-force coefficient, $\frac{\text{side force}}{q_\infty S}$

M Mach number

$\frac{m_I}{m_\infty}$ inboard inlet mass-flow ratio, $\frac{\text{inboard inlet mass flow}}{\text{free-stream mass flow based on inboard inlet area}}$

$\frac{m_O}{m_\infty}$ outboard inlet mass-flow ratio, $\frac{\text{outboard inlet mass flow}}{\text{free-stream mass flow based on outboard inlet area}}$

p rolling velocity

$\frac{pb}{2V}$ wing tip helix angle

q_∞ free-stream dynamic pressure

R Reynolds number

S total wing area

V free-stream velocity

α angle of attack

β angle of sideslip

Configuration Notation

Notation	Model No.
$F_1W_1C_1V_1N_1$	1
$F_1W_1C_1V_1N_2$	2
$F_1W_1C_1V_1N_3$	3
$F_2W_2C_1V_2N_1$	4
$F_1W_2C_1V_1N_1$	5

Component

F_1	fuselage with afterbody
F_2	fuselage without afterbody
W_1	wing
W_2	wing with 60° drooped tips
C_1	canard
V_1	single vertical tail
V_2	twin vertical tails
N_1	all nacelles aft
N_2	inboard nacelles forward
N_3	inboard nacelles forward and low

APPARATUS AND TEST PROCEDURE

Test Facility

The experimental data reported herein were obtained in the 11- by 11-foot, 9- by 7-foot, and 8- by 7-foot test sections of the Ames Unitary Plan Wind Tunnel. This wind tunnel is of the closed-circuit variable-pressure type. The 11- by 11-foot, 9- by 7-foot, and 8- by 7-foot test sections utilize, respectively, slotted walls and a symmetric flexible nozzle, an asymmetric adjustable nozzle, and a symmetric flexible walled nozzle to provide for continuous variation of the test Mach number from 0.65 to 1.4, 1.5 to 2.5, and 2.5 to 3.5. Models tested in this facility are sting mounted on a support system capable of movement to combined angles of attack and sideslip. Model forces and moments are measured by a six-component strain-gage balance located within the model.

Models

Illustrations of the test models are shown in the photographs of figure 2 and sketches of figure 3. Model geometric characteristics are presented in table I and a key to the nacelle locations and mass flows is shown in table II. Model configurations employ the fuselage, wing, canard, and vertical tail of reference 3. The wing has a hexagonal airfoil section with constant 3-percent thickness from 30 to 70 percent. Two vertical-tail configurations, a single tail and a twin tail arrangment, were tested. Both tail configurations had the same plan form. The canard and vertical tails were set at 0° deflection throughout the test.

The test configurations are separated into five groups designated models 1, 2, 3, 4, and 5 to facilitate presentation of data and discussion of results. All five models have the same wing, canard, and tail plan forms, and forebody. Model 1 incorporates four nacelles located in the aft position and a single vertical tail on an extended afterbody as shown in figure 3(a). Model 2 is model 1 with the inboard nacelles moved forward 0.81 nacelle lengths as shown in figure 3(b). Model 3 is model 2 with the inboard nacelles lowered one inlet diameter. Model 4 incorporates all nacelles aft, twin vertical tails mounted on the wing, no afterbody, and wing tips deflected downward 60°. Model 5 is model 1 with wing tips deflected 60°.

TEST CONDITIONS

Data were obtained at Mach numbers of 0.65, 0.85, 0.95, 1.0, 1.1, 1.25, 1.4, 1.6, 2.5, 3.0, and 3.5. Both the angles of attack and sideslip were varied from -6° to $+8^\circ$. Longitudinal data were obtained with the model at 0° of sideslip, and lateral and directional data were obtained with 3° and 5° angle of attack. The test Reynolds numbers based on the reference mean aerodynamic chord were 4.2 million and 3.5 million.

Three inlet mass flow ratios 1.0, ≈0.3, and 0 were used. Mass-flow ratio was assumed to be 1.0 for the open nacelles. For the partial mass-flow condition a nacelle exit diameter of 0.65 inch was used throughout the test. As a result, mass-flow ratio which was calculated from a measured exit static pressure with the assumption of sonic velocity at the exit, varied from about 0.2 at $M = 0.65$ to 0.3 at $M = 3.5$ with $\alpha = 0^\circ$. Mass-flow ratio varied slightly with α and β. The maximum variation was about ±0.15 for the inboard aft inlet position where wing precompression was felt.

All the test configurations incorporated fixed boundary-layer transition at about 10-percent chord of the wing, canard, and vertical tails. Transition was also fixed 2 inches back of the fuselage apex and 1 inch back of the inlet lip. The sublimation technique of reference 4 was used to verify the occurrence of transition at the desired location.

Reduction of Data

The data presented herein have been reduced to coefficient form based on the model wing geometry as listed in table I. The pitching- and yawing-moment coefficients have been referred to the projection, on the body center line, of the 0.25 point of the wing mean aerodynamic chord. All coefficients were referred to the stability axes as indicated in figure 1.

The base pressures were measured and the drag data were adjusted to correspond to conditions wherein the base pressures are equal to free-stream static pressure. Internal drag has been subtracted and buoyancy corrections were applied to the drag data. Boundary-layer trip drag has not been subtracted from the model drag data. Yawing- and pitching-moment data were not adjusted for nacelle base drag or internal drag because these effects were negligible.

Model attitude has been corrected for balance and sting deflection and local stream angles.

RESULTS AND DISCUSSION

A complete set of test data is presented in tabular form in tables III through VII. Typical data and summary curves are presented in figures 4 through 22. The magnitude of the interference effects resulting from diversion of the flow around the nacelles are illustrated by a comparison of the over-all incremental forces and moments with the calculated contribution of the axial force on the blocked nacelles. The calculated values, obtained by use of the experimental drag of a flat-faced cylinder of reference 5, are plotted for comparison with the experimental data. The rolling moments calculated for turning of the flow by the open nacelles (ref. 6) are also presented.

Model 1

Directional characteristics.- The effects of off-design inlet mass flow upon the directional characteristics of model 1 are illustrated by the data of figure 4 and summarized in figure 5. The major effects were the incremental yawing moments which resulted as mass flow was reduced. Small effects of reduced flow of either inboard or outboard nacelle on yawing moments were present for Mach numbers below 2.0. Incremental yawing moments resulting from zero flow of either nacelle were less than that produced by 1° of sideslip of the model with unrestricted flow through the nacelles. At Mach numbers above 2.0, however, large effects were evident. The outboard nacelle was responsible for the greatest yawing moments as expected. Zero mass flow of this nacelle at Mach number 3.0 and 5° angle of attack produced a yawing moment equal to that developed by the model with unrestricted flow at about 5° of sideslip. The data of figures 4 and 5 were obtained at 3° angle of attack; however, the data of table III indicate that the incremental yawing moments are independent of angle of attack in the range of 0° to 5°.

The incremental yawing moments present with reduced mass flow are compared in figure 5 with the incremental yawing moments calculated from consideration of the drag forces on the nacelle alone. For Mach numbers less than about 2.5, the interference effects were compensating in that the measured moments were considerably less than those calculated. For Mach numbers of 2.5 to 3.5 the measured incremental yawing moments were greater than calculated for the outboard nacelle and were in fair agreement with calculated values for the inboard nacelle.

Directional stability, $\partial C_n/\partial\beta$, was unaffected by reduced flow through the inboard nacelle at all Mach numbers, and through the outboard nacelle at Mach numbers below 2.0. However, between Mach numbers 2.0 and 3.0, reduced flow through the outboard nacelle caused a reduction in directional stability for a portion of the range of sideslip angles.

These effects are illustrated in figure 4(b). The disturbance field generated by the outboard nacelle inlet was able to pass over the wing and thus affect the flow over the vertical tail whereas the inboard disturbance field was confined under the wing. At Mach numbers below 2.0 the outboard inlet shock wave passed far enough ahead of the vertical tail so that the tail was in a field of minor disturbances. At Mach numbers above 3.0 less of the outboard disturbance field went over the wing and the shock wave passed behind the vertical tail. The expansion field of the nacelle exit may also have a destabilizing influence. Further investigation is necessary to determine the portion of the interference effects contributed by each of these fields.

Lateral characteristics.- The effects of reduced inlet mass flow operation upon lateral charactertistics of model 1 are illustrated in figures 6, 7, and 8. The primary effects were large incremental rolling moments with only slight changes in dihedral effect, $\partial C_l/\partial\beta$. The increments were a function of Mach number, inlet mass-flow ratio, angle of attack, and nacelle lateral position. Large incremental rolling moments occurred throughout the Mach number range for reduced flow through the inboard nacelle and at Mach numbers below 2.2 for the outboard nacelle. For Mach numbers of 2.0 to 3.5, zero flow through the inboard nacelle resulted in considerably larger incremental rolling moments than zero flow through the outboard nacelle. Interference effects accounted for most of the measured rolling moment. As indicated in figure 7 the incremental rolling moments were far greater than calculated for turning of the flow by the open nacelles (ref. 6). Rolling moments were produced which tended to raise the affected wing at Mach numbers above 2.0, and drop the affected wing at Mach numbers below 0.95, and between 1.2 and 2.0, as denoted in figures 6(a) and 7(a). Zero flow through the inboard nacelle at Mach number 3.0 produced an incremental rolling moment of 0.0015, which for an assumed aileron effectiveness of 0.0003 will require 5° of aileron deflection to trim. With this incremental rolling moment and a damping in roll value of -0.11 measured for the same configuration with unrestricted nacelles (unpublished data), a pb/2V value of 0.014 is obtained. At an assumed altitude of 70,000 feet a roll rate of about 0.8 radian per second will result for a 100-foot-span airplane.

Incremental rolling moment was a significant function of angle of attack as indicated in figure 8. For Mach numbers greater than 2.0 and less than 1.0 the largest variations with angle of attack occurred for reduced mass flow through the outboard nacelle.

Longitudinal characteristics.- Effects of reduced mass flow operation of a nacelle upon pitching-moment characteristics of model 1 are presented in figures 9 through 12.[1] A generally positive incremental pitching moment was produced by the inboard nacelle with significant increments occurring

[1]The moment reference center chosen resulted in a longitudinally neutral or unstable configuration at Mach number 0.65.

in the Mach number range of 1.0 and 2.0. The maximum increment for zero flow at supersonic speeds was equivalent to that produced by a change in angle of attack at about -1°. As indicated in figure 10, the calculated incremental pitching moment due to drag of a plugged inboard nacelle was negligible compared to interference effects.

Variations in longitudinal static margin as a result of reduced flow are illustrated in figure 11. Zero flow through either nacelle produced at Mach number 1.0 a negative incremental $\partial C_m/\partial C_L$ (an increase in longitudinal static margin) of about 2-1/2 percent of mean aerodynamic chord. At all other Mach numbers incremental $\partial C_m/\partial C_L$ was 1 percent or less.

A large incremental drag resulted from reduced flow. At zero flow conditions the nacelle is effectively a flat-faced cylinder. Incremental drag at zero lift is compared in figure 12 with calculated drag of an equivalent flat-faced cylinder obtained with the use of coefficients from reference 5. (Base drag has been removed from both sets of data.)

The experimental incremental drag was generally higher than calculated. The best agreement was indicated for the outboard nacelle. For the inboard nacelle, interference effects increased the drag by about 100 percent at Mach number 0.65, and about 30 percent at supersonic Mach numbers.

Models 2 and 3

It was expected that off-design mass-flow effects of the outboard nacelle for models 2 and 3 would be little different than for model 1 because the configurations varied only in location of the inboard nacelles. Consquently, the mass-flow ratio of the outboard nacelle was maintained at 1.0 and only the mass flow through the inboard nacelle was varied. Incremental changes in stability characteristics for models 2 and 3 were similar so the discussion is combined. No typical data curves are presented since the increments in forces and moments are small and are best illustrated in a summary form.

Directional and lateral characteristics.- Incremental yawing moments, as illustrated in the summary curves of figure 13, were equal to or less than that due to the drag of the blocked nacelle for all Mach numbers except near 2.0. Directional stability was only slightly affected by reduced flow conditions.

Incremental rolling moments produced by reduced flow are illustrated in figure 14. For either nacelle location the measured rolling-moment increments were far greater than the small moments calculated for turning of the flow by the open nacelles. Zero flow through the inboard nacelle

of either model at Mach number 3.0 resulted in an incremental rolling moment of -0.0012. This is about the same magnitude but of opposite sign to that for a plugged inboard nacelle in the aft position (model 1). Differences between these results are probably due to inlet and exit interferences. When the inlet was in the forward positions, the inlet disturbance field passed over the wing and the exit expansion field may have influenced the pressures on the underside of the wing. Rolling-moment increments did not diminish with the increased distance between the nacelle and wing of model 3.

Longitudinal characteristics.- Pitch-down moment increments occurred for both configurations in the transonic Mach number range as shown in figure 15. Small pitch-up moments were indicated at Mach numbers above 1.3. The calculated moments due to drag of the blocked nacelle are small.

A decrease in longitudinal static margin of about 2 percent of mean aerodynamic chord occurred near Mach number 1.0 with zero flow condition for either model, as illustrated in figure 16. Static margin changed less than 1 percent at all other Mach numbers. For most of the Mach number range, incremental drag for zero flow agrees reasonably well with calculated values as illustrated in figure 17. The agreement is better than for the same nacelle in the aft position (model 1, fig. 12(a)). Incremental drag is independent of nacelle vertical position.

Model 4

Model 4 was similar to model 1 in that all nacelles were aft; however, it differed in that twin vertical tails, no afterbody, and deflected wing tips were incorporated. Since the incremental results at low and high Mach numbers conformed closely to those of model 1, no data were obtained at Mach numbers 1.6 and 2.0. In addition, the partial flow condition was omitted since results from model 1 indicated that the increments produced were similar, with a reduced magnitude, to those of zero flow.

Directional and lateral characteristics.- Effects of off-design inlet mass flow on directional and lateral characteristics are presented in figures 18, 19, and 20. Incremental yawing moments were small and less than calculated for Mach numbers below 1.4 as shown in figure 20(a). For the Mach number range from 2.5 to 3.5, fair agreement is shown for the inboard nacelle plugged but not for the outboard nacelle plugged and the incremental moments are similar to those of model 1 (fig. 5).

The typical data presented in figure 18 indicate that directional stability was only slightly affected by plugging either nacelle. This is somewhat surprising since the deflected wing tip is close to the outboard nacelle and the left vertical tail is enveloped by the outboard inlet disturbance field which passes over the wing. The tabulated data

presented in table VI indicate that, unlike the other models, rudder deflection will be required at Mach number 3.5 to trim the incremental yawing moment produced by zero flow through the outboard nacelle. The model was directionally unstable at Mach number 3.5 at sideslip angles greater than 6°.

As shown in figure 20(b), the interference effects on lateral stability were found to be similar to those of model 1 (fig. 8). The plugged inboard nacelle produced large positive increments in rolling moment at the high Mach numbers. As with model 1, the incremental rolling moments were far greater than those attributable to turning of the flow by the open nacelles.

Longitudinal characteristics.- The effects of off-design mass flow upon longitudinal characteristics are shown in figures 21 and 22. Significant incremental pitching moments at zero lift were produced by the inboard nacelle for Mach numbers 1.0 and 3.5. The incremental moments were equivalent to those resulting from a change in angle of attack of -3° and +3-1/2° at Mach numbers 1.0 and 3.5, respectively.

Zero flow through either nacelle increased longitudinal static margin about 4 percent at Mach number 1.0. Static margin was decreased about 1 percent at Mach number 3.5.

Incremental drag from zero flow through either nacelle is similar to that of model 1 (fig. 12).

Model 5

The limited data at Mach numbers 2.5, 3.0, and 3.5 obtained for model 5 are presented in table VII.

CONCLUDING REMARKS

The following observations are indicated by the experimental results herein presented.

Large yawing moments were produced at Mach numbers greater than 2.0 by reduced mass flow through an outboard nacelle. These yawing moments are believed to result from (1) interference effects on the vertical tail, adjacent nacelle, and fuselage, and (2) drag of the blocked nacelle. Important but smaller yawing moments resulted when an inboard nacelle in the aft position was blocked.

Reduced mass flow through an inboard nacelle in the aft position produced large wing-up rolling moments at Mach numbers above 2.0 and wing down rolling moments at Mach numbers below 2.0. Wing-down rolling moments occurred when the inboard nacelle in the forward position was blocked.

Significant incremental pitching moments at zero lift near Mach number 1.0 were produced when the mass flow of the inboard nacelle was reduced.

Large changes in longitudinal static margin resulted from reduced mass flow for all configurations at Mach number 1.0. Blocking an aft nacelle increased the longitudinal static margin while blocking a nacelle in the forward position reduced it.

Interference effects of off-design inlet mass-flow conditions were found to be a function of nacelle placement relative to other components such as the fuselage, wing, and vertical tail, and in addition were found to be a function of α, β, Mach number, and inlet mass-flow ratio.

Ames Research Center
National Aeronautics and Space Administration
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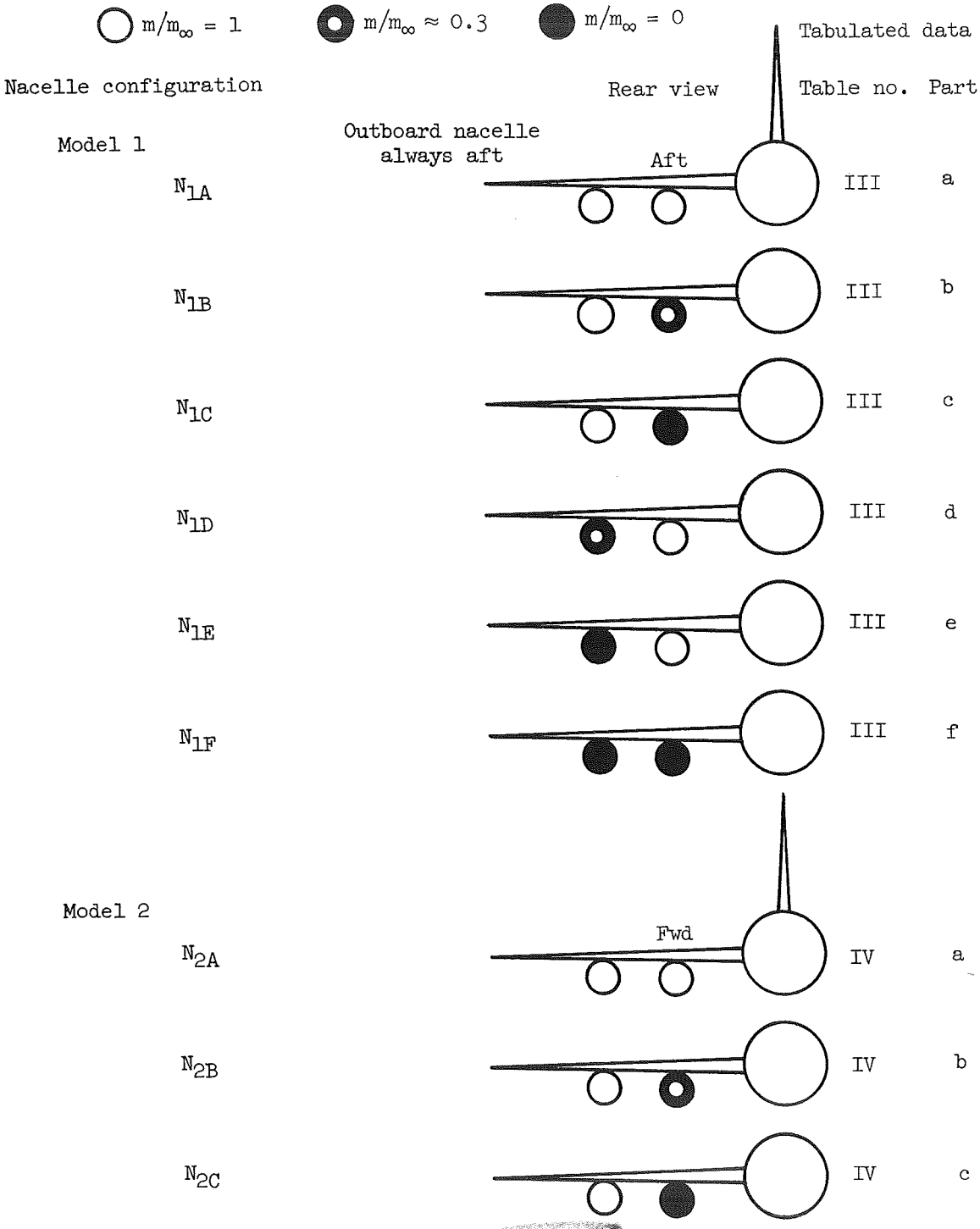
TABLE I.- GEOMETRIC CHARACTERISTICS

Wing	
Leading-edge sweep, deg	59.0
Trailing-edge sweep, deg	-10.0
Total area, sq in.	349.67
Mean aerodynamic chord, in.	16.91
Span, in.	27.57
Aspect ratio	2.17
Taper ratio	0
Root chord, in.	25.37
Tip chord, in.	0
Dihedral, deg	0
Incidence, deg	0
Airfoil section	Hexagon with thickness constant from 30 to 70 percent
Thickness, percent	3.0
Deflected tip	
Span, in.	3.45
Root chord, in.	6.34
Area, sq in. (single surface only)	10.93
Hinge-line station	0.75 b/2
Deflection angle, deg	60.0
Fuselage	
Cross section	Circular
Forebody shape	Circular arc, radius = 146.32 in.
Centerbody shape	Cylindrical
Length, in.	
With afterbody	57.60
Without afterbody	47.93
Maximum diameter, in.	3.6
Maximum cross-sectional area, sq in.	10.18
Fineness ratio	
With afterbody	16.0
Without afterbody	13.3
Canard	
Leading-edge sweep, deg	63.4
Total area, sq in.	39.16
Exposed area, sq in.	22.80
Mean aerodynamic chord, in.	5.90
Span, in.	8.85
Aspect ratio	2.00
Taper ratio	0
Root chord, in.	8.85
Tip chord, in.	0
Airfoil section	Hexagon with thickness constant from 30 to 70 percent
Thickness, percent	3.0

TABLE I.- GEOMETRIC CHARACTERISTICS - Concluded

Vertical tail	
(Single and twin verticals are same except as noted)	
Leading-edge sweep, deg	60.0
Exposed area, sq in.	
Single	41.42
Each twin	42.13
Span, in.	5.65
Aspect ratio	
Single	0.771
Twin	0.758
Taper ratio	0.336
Root chord, in.	10.97
Tip chord, in.	3.69
Airfoil section	Hexagon with thickness constant from 30 to 70 percent
Thickness, percent	
Single	
Root	4.5
Tip	3.0
Twin	
Root and tip	3.0
Nacelles	
Cross section	Circular
Length, in.	12.28
Maximum diameter, in.	1.60
Maximum cross-sectional area, sq in.	2.01
Inlet area, sq in.	1.54
Exit area, sq in.	
$m/m_\infty = 1.0$	1.54
$m/m_\infty \approx 0.3$	0.33
$m/m_\infty = 0$	0
Lip angle, deg	1.4
Boattail angle, deg	2.9
Wing spanwise location	
Inboard	0.36 b/2
Outboard	0.62 b/2

TABLE II.- NACELLE LOCATION, MASS FLOW KEY, AND INDEX TO TABULATED DATA



Note: Mass flow refers to left wing nacelles only, right wing nacelles always open

TABLE II. - NACELLE LOCATION, MASS FLOW KEY, AND INDEX TO TABULATED DATA - Concluded

Nacelle configuration		Tabulated data	
Model 3			
	N_{3A}	V	a
	N_{3B}	V	b
	N_{3C}	V	c
Model 4			
	N_{1A}	VI	a
	N_{1C}	VI	b
	N_{1E}	VI	c
Model 5			
	N_{1A}	VII	a

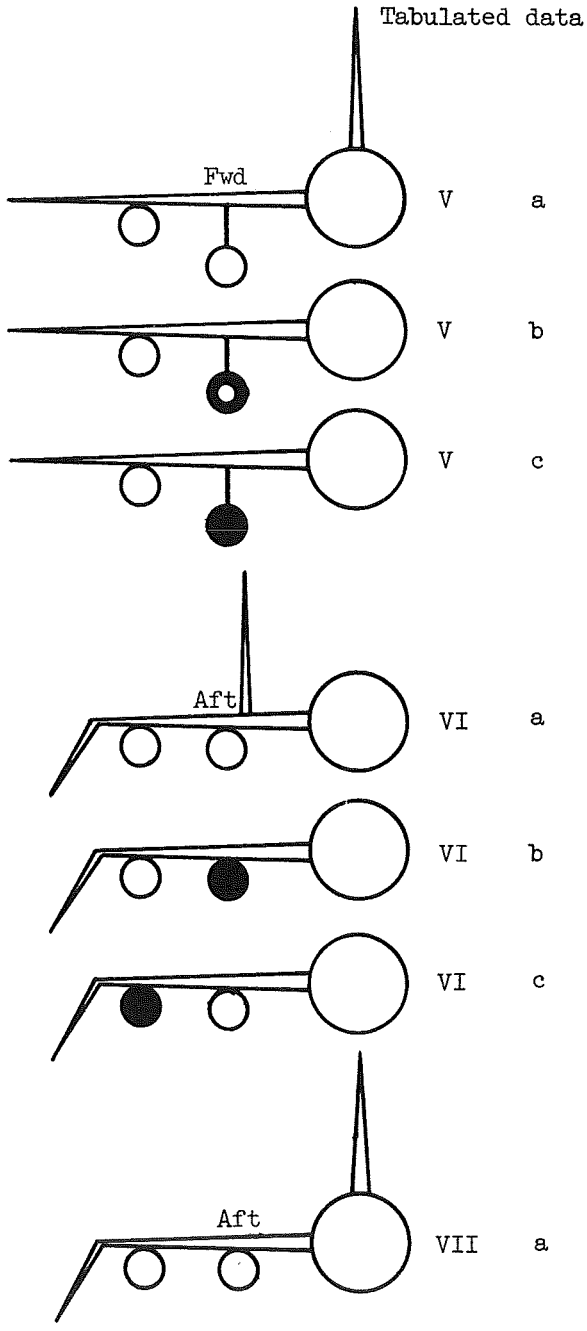
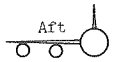


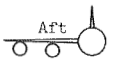
TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$)

(a) Mass flow configuration N_1A; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.3	00.0	-0.232	.0285	.0127	-0.002	-.0004	.0004	.0016	.0000	.0000
-02.1	00.0	-0.123	.0176	.0135	-0.002	-.0003	.0003	.0017	.0000	.0000
00.0	00.0	-0.026	.0140	.0120	-0.001	.0000	.0004	.0017	.0000	.0000
02.1	00.0	0.077	.0164	.0124	-0.001	.0002	.0003	.0018	.0000	.0000
04.3	00.0	0.186	.0263	.0144	-0.001	.0001	.0004	.0018	.0000	.0000
08.7	00.0	0.411	.0729	.0248	-0.001	.0003	.0001	.0020	.0000	.0000
03.2	-04.0	0.129	.0194	.0131	0.036	-.0135	.0064	.0019	.0000	.0000
03.2	-02.0	0.133	.0201	.0130	0.016	-.0063	.0034	.0018	.0000	.0000
03.2	00.0	0.131	.0205	.0130	-0.002	.0000	.0003	.0017	.0000	.0000
03.2	01.9	0.128	.0200	.0129	-0.019	.0059	-.0024	.0018	.0000	.0000
03.2	03.9	0.123	.0192	.0123	-0.041	.0132	-.0055	.0020	.0000	.0000
03.2	05.9	0.123	.0196	.0123	-0.063	.0217	-.0085	.0019	.0000	.0000
					M = 0.85					
-04.4	00.0	-0.254	.0307	.0201	-0.002	-.0004	.0004	.0016	.0000	.0000
-02.2	00.0	-0.137	.0182	.0183	-0.002	-.0003	.0004	.0016	.0000	.0000
00.0	00.0	-0.027	.0139	.0144	-0.001	.0000	.0004	.0019	.0000	.0000
02.2	00.0	0.089	.0171	.0124	-0.002	.0002	.0004	.0017	.0000	.0000
04.4	00.0	0.208	.0284	.0123	-0.001	.0001	.0004	.0019	.0000	.0000
08.9	00.0	0.446	.0803	.0212	-0.001	.0004	.0001	.0023	.0000	.0000
03.3	-04.0	0.148	.0209	.0123	0.038	-.0143	.0072	.0022	.0000	.0000
03.3	-02.0	0.149	.0209	.0123	0.017	-.0066	.0038	.0022	.0000	.0000
03.3	00.0	0.147	.0212	.0124	-0.002	.0000	.0004	.0021	.0000	.0000
03.3	01.9	0.143	.0211	.0122	-0.020	.0062	-.0028	.0020	.0000	.0000
03.3	03.9	0.140	.0205	.0119	-0.041	.0140	-.0061	.0021	.0000	.0000
03.3	05.9	0.137	.0199	.0120	-0.064	.0227	-.0096	.0024	.0000	.0000
					M = 0.95					
-04.4	00.0	-0.273	.0336	.0306	-0.002	-.0002	.0002	.0018	.0000	.0000
-02.2	00.0	-0.145	.0205	.0247	-0.001	-.0004	.0003	.0015	.0000	.0000
00.0	00.0	-0.027	.0150	.0166	-0.001	-.0001	.0003	.0018	.0000	.0000
02.2	00.0	0.101	.0181	.0086	-0.002	.0002	.0004	.0019	.0000	.0000
04.5	00.0	0.236	.0320	.0041	-0.002	.0001	.0004	.0017	.0000	.0000
09.0	00.0	0.492	.0914	.0054	-0.002	.0004	.0003	.0020	.0000	.0000
03.4	-04.0	0.171	.0235	.0059	0.039	-.0149	.0080	.0022	.0000	.0000
03.4	-02.0	0.172	.0240	.0056	0.018	-.0068	.0042	.0021	.0000	.0000
03.3	00.0	0.169	.0237	.0056	-0.001	.0001	.0004	.0020	.0000	.0000
03.3	01.9	0.165	.0235	.0060	-0.021	.0066	-.0032	.0021	.0000	.0000
03.3	03.9	0.165	.0236	.0061	-0.042	.0148	-.0071	.0022	.0000	.0000
03.3	05.9	0.162	.0229	.0061	-0.065	.0239	-.0110	.0024	.0000	.0000
					M = 1.00					
-04.4	00.0	-0.278	.0403	.0396	-0.001	-.0004	.0004	.0010	.0000	.0000
-02.2	00.0	-0.149	.0260	.0273	0.000	-.0005	.0003	.0012	.0000	.0000
00.0	00.0	-0.026	.0224	.0158	-0.001	-.0001	.0004	.0010	.0000	.0000
02.2	00.0	0.107	.0257	.0033	-0.001	.0002	.0004	.0012	.0000	.0000
04.4	00.0	0.243	.0395	-.0093	-0.001	.0000	.0005	.0011	.0000	.0000
06.7	00.0	0.384	.0645	-.0211	-0.001	-.0001	.0006	.0012	.0000	.0000
09.0	00.0	0.529	.1030	-.0336	-0.001	.0004	.0003	.0011	.0000	.0000
03.3	-04.0	0.175	.0305	-.0033	0.040	-.0153	.0079	.0013	.0000	.0000
03.3	-02.0	0.178	.0310	-.0036	0.018	-.0070	.0041	.0013	.0000	.0000
03.3	00.0	0.175	.0308	-.0035	-0.002	.0000	.0004	.0013	.0000	.0000
03.3	01.9	0.175	.0311	-.0036	-0.021	.0064	-.0030	.0011	.0000	.0000
03.3	03.9	0.178	.0309	-.0044	-0.043	.0146	-.0069	.0014	.0000	.0000
03.4	05.9	0.179	.0306	-.0049	-0.067	.0239	-.0108	.0016	.0000	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

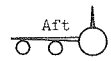
(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Continued



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.10										
-04.4	00.0	-0.268	.0398	.0407	0.000	-.0006	.0004	.0057	.0000	.0000
-02.2	00.0	-0.145	.0260	.0295	0.000	-.0004	.0003	.0054	.0000	.0000
00.0	00.0	-0.021	.0215	.0132	0.000	-.0002	.0004	.0055	.0000	.0000
02.2	00.0	0.110	.0258	-.0007	-0.001	.0002	.0004	.0053	.0000	.0000
04.5	00.0	0.241	.0399	-.0133	-0.001	.0000	.0006	.0055	.0000	.0000
06.7	00.0	0.372	.0643	-.0228	-0.001	-.0001	.0005	.0058	.0000	.0000
09.0	00.0	0.502	.0999	-.0331	-0.001	.0005	.0003	.0060	.0000	.0000
03.4	-06.0	0.179	.0302	-.0075	0.063	-.0250	.0121	.0063	.0000	.0000
03.4	-04.0	0.178	.0307	-.0078	0.040	-.0158	.0080	.0061	.0000	.0000
03.4	-02.0	0.179	.0310	-.0080	0.018	-.0074	.0041	.0060	.0000	.0000
03.4	00.0	0.177	.0311	-.0079	-0.002	.0001	.0003	.0058	.0000	.0000
03.4	01.9	0.176	.0315	-.0076	-0.022	.0073	-.0033	.0055	.0000	.0000
03.4	03.9	0.178	.0314	-.0086	-0.044	.0156	-.0072	.0058	.0000	.0000
03.4	05.9	0.178	.0307	-.0086	-0.068	.0252	-.0112	.0060	.0000	.0000
M = 1.25										
-04.4	00.0	-0.242	.0368	.0385	0.000	-.0006	.0005	.0058	.0000	.0000
-02.2	00.0	-0.127	.0242	.0254	0.000	-.0005	.0006	.0054	.0000	.0000
00.0	00.0	-0.012	.0201	.0090	0.000	-.0003	.0006	.0052	.0000	.0000
02.2	00.0	0.109	.0242	-.0072	-0.001	.0001	.0004	.0051	.0000	.0000
04.5	00.0	0.236	.0376	-.0221	-0.001	-.0002	.0005	.0056	.0000	.0000
06.7	00.0	0.365	.0619	-.0347	-0.001	-.0001	.0004	.0059	.0000	.0000
09.0	00.0	0.485	.0952	-.0436	-0.001	.0003	.0002	.0063	.0000	.0000
03.3	-06.0	0.175	.0285	-.0138	0.066	-.0261	.0105	.0062	.0000	.0000
03.3	-04.0	0.176	.0292	-.0146	0.042	-.0164	.0070	.0060	.0000	.0000
03.3	-02.0	0.179	.0298	-.0151	0.019	-.0077	.0036	.0058	.0000	.0000
03.3	00.0	0.173	.0292	-.0149	-0.002	.0001	.0004	.0057	.0000	.0000
03.3	01.9	0.173	.0292	-.0153	-0.022	.0074	-.0026	.0056	.0000	.0000
03.3	03.9	0.175	.0291	-.0155	-0.045	.0161	-.0059	.0059	.0000	.0000
03.3	05.9	0.175	.0290	-.0152	-0.070	.0260	-.0094	.0059	.0000	.0000
03.3	07.9	0.173	.0289	-.0145	-0.096	.0358	-.0124	.0060	.0000	.0000
M = 1.40										
-04.4	00.0	-0.215	.0342	.0344	-0.001	.0005	.0001	.0053	.0000	.0000
-02.1	00.0	-0.105	.0232	.0215	-0.001	.0007	.0001	.0052	.0000	.0000
00.0	00.0	0.002	.0198	.0059	-0.002	.0008	.0002	.0051	.0000	.0000
02.2	00.0	0.113	.0237	-.0081	-0.002	.0009	.0002	.0050	.0000	.0000
04.5	00.0	0.226	.0361	-.0211	-0.001	.0006	.0003	.0051	.0000	.0000
06.7	00.0	0.340	.0577	-.0334	-0.001	.0005	.0002	.0053	.0000	.0000
08.9	00.0	0.450	.0879	-.0458	-0.002	.0009	.0001	.0056	.0000	.0000
03.3	-06.0	0.165	.0279	-.0141	0.067	-.0269	.0090	.0056	.0000	.0000
03.3	-04.0	0.162	.0277	-.0144	0.043	-.0171	.0060	.0055	.0000	.0000
03.3	-02.0	0.164	.0283	-.0146	0.020	-.0080	.0032	.0054	.0000	.0000
03.3	00.0	0.161	.0279	-.0142	-0.001	.0006	.0004	.0054	.0000	.0000
03.3	01.9	0.160	.0279	-.0144	-0.023	.0089	-.0023	.0052	.0000	.0000
03.3	03.9	0.163	.0280	-.0152	-0.046	.0179	-.0052	.0054	.0000	.0000
03.3	05.9	0.162	.0279	-.0149	-0.071	.0276	-.0082	.0056	.0000	.0000
03.3	07.9	0.163	.0280	-.0146	-0.098	.0368	-.0107	.0058	.0000	.0000

[redacted]

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

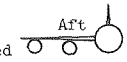
(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Continued 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
				M = 1.60						
-04.2	00.0	-0.190	.0313	.0285	-0.002	.0003	.0009	.0045	.0000	.0000
-02.1	00.0	-0.093	.0216	.0161	-0.001	.0000	.0009	.0045	.0000	.0000
00.0	00.0	0.001	.0187	.0033	-0.001	.0002	.0009	.0044	.0000	.0000
02.1	00.0	0.095	.0222	-.0090	-0.001	.0004	.0010	.0044	.0000	.0000
04.2	00.0	0.195	.0324	-.0214	0.000	.0003	.0008	.0044	.0000	.0000
08.6	00.0	0.394	.0762	-.0430	0.000	.0004	.0007	.0045	.0000	.0000
03.2	-05.9	0.140	.0257	-.0133	0.064	-.0247	.0078	.0051	.0000	.0000
03.2	-03.9	0.142	.0259	-.0143	0.043	-.0165	.0058	.0049	.0000	.0000
03.2	-01.9	0.141	.0259	-.0146	0.019	-.0074	.0033	.0046	.0000	.0000
03.2	00.0	0.146	.0264	-.0152	0.000	.0002	.0009	.0044	.0000	.0000
03.2	02.0	0.151	.0267	-.0163	-0.022	.0083	-.0014	.0044	.0000	.0000
03.2	04.0	0.151	.0268	-.0162	-0.045	.0170	-.0040	.0046	.0000	.0000
03.2	06.0	0.152	.0268	-.0161	-0.067	.0251	-.0063	.0049	.0000	.0000
03.3	08.0	0.157	.0270	-.0158	-0.092	.0329	-.0085	.0052	.0000	.0000
				M = 2.00						
-04.2	00.0	-0.159	.0286	.0222	-0.003	.0013	.0005	.0036	.0000	.0000
-02.1	00.0	-0.079	.0202	.0126	-0.002	.0012	.0005	.0035	.0000	.0000
00.0	00.0	0.001	.0175	.0018	-0.002	.0011	.0005	.0035	.0000	.0000
02.1	-00.1	0.084	.0209	-.0083	-0.002	.0013	.0006	.0035	.0000	.0000
04.2	-00.1	0.169	.0302	-.0180	-0.002	.0013	.0005	.0036	.0000	.0000
08.5	-00.1	0.335	.0675	-.0356	-0.002	.0017	.0005	.0038	.0000	.0000
03.1	-06.1	0.122	.0245	-.0128	0.052	-.0152	.0058	.0040	.0000	.0000
03.1	-04.1	0.125	.0246	-.0134	0.033	-.0094	.0041	.0039	.0000	.0000
03.1	-02.1	0.125	.0246	-.0130	0.014	-.0035	.0022	.0038	.0000	.0000
03.1	-00.1	0.129	.0249	-.0134	-0.002	.0017	.0006	.0036	.0000	.0000
03.2	01.9	0.132	.0252	-.0138	-0.020	.0071	-.0013	.0037	.0000	.0000
03.2	03.9	0.131	.0253	-.0135	-0.039	.0122	-.0031	.0038	.0000	.0000
03.2	05.9	0.131	.0254	-.0132	-0.058	.0171	-.0050	.0040	.0000	.0000
03.2	07.9	0.129	.0252	-.0135	-0.081	.0225	-.0064	.0042	.0000	.0000
				M = 2.50						
-06.4	00.0	-0.200	.0379	.0205	-0.003	.0002	.0002	.0036	.0000	.0000
-04.3	00.0	-0.136	.0259	.0153	-0.003	.0001	.0002	.0036	.0000	.0000
-02.2	00.0	-0.071	.0185	.0084	-0.002	.0001	.0002	.0036	.0000	.0000
-00.1	00.0	-0.005	.0156	.0006	-0.002	.0000	.0002	.0036	.0000	.0000
01.9	00.0	0.064	.0180	-.0071	-0.001	-.0001	.0002	.0036	.0000	.0000
04.0	00.0	0.132	.0254	-.0139	-0.001	-.0001	.0002	.0036	.0000	.0000
06.1	00.0	0.199	.0378	-.0201	-0.001	-.0001	.0002	.0037	.0000	.0000
08.2	00.0	0.267	.0555	-.0264	-0.002	-.0001	.0002	.0038	.0000	.0000
02.9	-06.0	0.096	.0213	-.0107	0.047	-.0093	.0042	.0037	.0000	.0000
02.9	-04.0	0.096	.0211	-.0109	0.030	-.0063	.0028	.0037	.0000	.0000
02.9	-02.0	0.096	.0209	-.0106	0.014	-.0030	.0015	.0036	.0000	.0000
02.9	00.0	0.098	.0210	-.0106	-0.002	-.0001	.0002	.0036	.0000	.0000
02.9	02.0	0.097	.0211	-.0107	-0.017	.0030	-.0012	.0036	.0000	.0000
02.9	04.0	0.098	.0213	-.0110	-0.033	.0062	-.0024	.0037	.0000	.0000
02.9	06.0	0.096	.0214	-.0110	-0.050	.0092	-.0038	.0037	.0000	.0000
02.9	08.0	0.095	.0214	-.0111	-0.070	.0123	-.0048	.0038	.0000	.0000

[redacted]

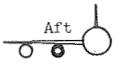
TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(a) Mass-flow configuration N_1A; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Concluded



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 3.00										
-06.3	00.1	-0.168	.0335	.0138	-0.002	.0000	.0001	.0030	.0000	.0000
-04.3	00.1	-0.113	.0231	.0097	-0.002	.0000	.0001	.0030	.0000	.0000
-02.2	00.1	-0.057	.0166	.0051	-0.002	.0000	.0001	.0029	.0000	.0000
-00.1	00.1	0.000	.0141	-.0002	-0.001	-.0001	.0001	.0029	.0000	.0000
01.9	00.1	0.058	.0165	-.0052	0.000	-.0001	.0002	.0029	.0000	.0000
03.9	00.1	0.114	.0231	-.0096	-0.001	-.0002	.0002	.0029	.0000	.0000
06.0	00.1	0.172	.0339	-.0143	-0.001	-.0003	.0002	.0029	.0000	.0000
08.1	00.1	0.231	.0493	-.0195	-0.001	-.0003	.0002	.0029	.0000	.0000
-06.2	06.3	-0.171	.0337	.0138	-0.060	.0137	-.0022	.0031	.0000	.0000
-04.1	06.2	-0.113	.0230	.0092	-0.055	.0119	-.0026	.0031	.0000	.0000
-02.0	06.2	-0.056	.0169	.0043	-0.051	.0101	-.0031	.0030	.0000	.0000
00.0	06.2	-0.000	.0150	-.0002	-0.049	.0083	-.0034	.0030	.0000	.0000
02.0	06.3	0.056	.0172	-.0054	-0.048	.0066	-.0034	.0031	.0000	.0000
04.1	06.3	0.113	.0236	-.0108	-0.048	.0046	-.0033	.0031	.0000	.0000
06.2	06.3	0.173	.0346	-.0161	-0.049	.0029	-.0034	.0032	.0000	.0000
08.2	06.3	0.231	.0500	-.0211	-0.050	.0015	-.0036	.0033	.0000	.0000
02.7	-06.0	0.084	.0192	-.0080	0.045	-.0057	.0037	.0031	.0000	.0000
02.8	-04.0	0.084	.0191	-.0077	0.028	-.0038	.0025	.0031	.0000	.0000
02.9	-01.9	0.084	.0190	-.0073	0.013	-.0021	.0014	.0030	.0000	.0000
02.9	00.1	0.085	.0191	-.0073	-0.001	-.0002	.0001	.0028	.0000	.0000
03.0	02.1	0.085	.0194	-.0074	-0.015	.0018	-.0011	.0029	.0000	.0000
03.0	04.2	0.084	.0197	-.0078	-0.031	.0037	-.0023	.0030	.0000	.0000
03.0	06.2	0.084	.0199	-.0081	-0.047	.0056	-.0033	.0031	.0000	.0000
03.1	08.3	0.083	.0202	-.0081	-0.069	.0081	-.0043	.0032	.0000	.0000
04.8	-06.0	0.142	.0276	-.0136	0.047	-.0038	.0036	.0032	.0000	.0000
04.9	-01.9	0.141	.0275	-.0119	0.014	-.0015	.0014	.0031	.0000	.0000
05.0	00.1	0.143	.0278	-.0119	0.000	-.0003	.0002	.0030	.0000	.0000
05.0	02.1	0.143	.0281	-.0121	-0.016	.0011	-.0011	.0030	.0000	.0000
05.1	04.2	0.143	.0284	-.0128	-0.031	.0024	-.0023	.0030	.0000	.0000
05.2	08.3	0.141	.0289	-.0135	-0.070	.0063	-.0044	.0032	.0000	.0000
M = 3.50										
-06.3	00.0	-0.149	.0295	.0096	-0.003	.0003	.0002	.0024	.0000	.0000
-04.2	00.0	-0.101	.0200	.0069	-0.003	.0003	.0002	.0023	.0000	.0000
-02.2	00.0	-0.052	.0142	.0036	-0.003	.0003	.0001	.0023	.0000	.0000
-00.1	00.0	-0.003	.0121	-.0004	-0.003	.0002	.0001	.0023	.0000	.0000
01.8	00.0	0.047	.0141	-.0042	-0.002	.0002	.0001	.0022	.0000	.0000
03.9	00.0	0.097	.0200	-.0078	-0.002	.0002	.0001	.0022	.0000	.0000
06.0	00.0	0.147	.0295	-.0109	-0.002	.0002	.0001	.0022	.0000	.0000
08.0	00.0	0.197	.0427	-.0143	-0.002	.0001	.0001	.0022	.0000	.0000
02.5	-06.4	0.070	.0166	-.0063	0.044	-.0037	.0034	.0023	.0000	.0000
02.6	-04.2	0.071	.0166	-.0062	0.028	-.0029	.0024	.0023	.0000	.0000
02.7	-02.1	0.070	.0163	-.0060	0.013	-.0015	.0012	.0023	.0000	.0000
02.9	00.0	0.072	.0165	-.0059	-0.002	.0002	.0001	.0022	.0000	.0000
03.0	02.1	0.071	.0169	-.0061	-0.017	.0018	-.0010	.0022	.0000	.0000
03.2	04.3	0.071	.0174	-.0064	-0.032	.0031	-.0021	.0022	.0000	.0000
03.3	06.4	0.070	.0176	-.0063	-0.047	.0037	-.0031	.0024	.0000	.0000
03.4	08.6	0.070	.0182	-.0058	-0.067	.0048	-.0040	.0024	.0000	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(b) Mass-flow configuration N_{1B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{bF}}$	$C_{D_{bI}}$	$C_{D_{bO}}$
M = 0.65										
-04.3	00.0	-0.222	.0316	.0155	0.000	-.0006	.0004	.0017	.0002	.0000
-02.1	00.0	-0.118	.0210	.0163	0.000	-.0006	.0006	.0016	.0002	.0000
00.0	00.0	-0.022	.0171	.0146	0.001	-.0003	.0004	.0017	.0002	.0000
02.1	00.0	0.083	.0200	.0147	0.000	-.0001	.0001	.0016	.0002	.0000
04.3	00.0	0.193	.0305	.0167	0.000	-.0002	.0002	.0017	.0002	.0000
08.7	00.0	0.414	.0771	.0277	0.001	.0000	-.0004	.0019	.0002	.0000
03.2	-04.0	0.138	.0236	.0155	0.037	-.0137	.0064	.0019	.0002	.0000
03.2	-02.0	0.139	.0238	.0155	0.018	-.0065	.0033	.0019	.0002	.0000
03.2	00.0	0.136	.0237	.0157	0.001	-.0002	.0002	.0019	.0002	.0000
03.2	01.9	0.135	.0241	.0152	-0.017	.0057	-.0027	.0018	.0002	.0000
03.2	03.9	0.133	.0237	.0146	-0.038	.0131	-.0057	.0021	.0002	.0000
03.2	05.9	0.130	.0233	.0147	-0.060	.0216	-.0088	.0022	.0003	.0000
M = 0.85										
-04.3	00.0	-0.246	.0337	.0236	-0.001	-.0005	.0005	.0018	.0002	.0000
-02.1	00.0	-0.128	.0214	.0209	-0.001	-.0004	.0004	.0018	.0002	.0000
00.0	00.0	-0.017	.0179	.0165	0.000	-.0001	.0003	.0018	.0002	.0000
02.2	00.0	0.096	.0209	.0146	0.000	-.0001	.0003	.0018	.0002	.0000
04.4	00.0	0.216	.0332	.0146	0.001	-.0001	.0002	.0018	.0001	.0000
08.9	00.0	0.457	.0869	.0234	0.002	.0001	-.0004	.0022	.0002	.0000
03.3	-04.0	0.156	.0254	.0148	0.039	-.0145	.0072	.0021	.0001	.0000
03.3	-02.0	0.159	.0257	.0145	0.018	-.0068	.0036	.0021	.0002	.0000
03.3	00.0	0.156	.0258	.0143	0.000	-.0003	.0003	.0020	.0001	.0000
03.3	01.9	0.153	.0257	.0140	-0.018	.0060	-.0030	.0019	.0001	.0000
03.3	03.9	0.151	.0254	.0136	-0.040	.0138	-.0064	.0022	.0002	.0000
03.3	05.9	0.148	.0251	.0139	-0.062	.0228	-.0100	.0023	.0002	.0000
M = 0.95										
-04.4	00.0	-0.270	.0380	.0373	0.000	-.0007	.0011	.0016	.0000	.0000
-02.1	00.0	-0.138	.0234	.0255	0.000	-.0005	.0008	.0016	.0000	.0000
00.0	00.0	-0.020	.0185	.0163	0.000	-.0004	.0003	.0017	.0001	.0000
02.2	00.0	0.110	.0225	.0097	0.000	-.0002	.0002	.0017	.0000	.0000
04.5	00.0	0.242	.0361	.0061	0.001	-.0003	.0003	.0021	.0001	.0000
09.0	00.0	0.501	.0975	.0041	0.002	.0001	-.0004	.0020	.0002	.0000
M = 1.00										
-04.4	00.0	-0.275	.0452	.0503	0.000	-.0006	-.0011	.0009	.0005	.0000
-02.1	00.0	-0.144	.0313	.0361	-0.001	-.0003	-.0001	.0008	.0005	.0000
00.0	00.0	-0.021	.0259	.0200	0.000	-.0002	.0010	.0007	.0005	.0000
02.2	00.0	0.116	.0297	.0038	0.000	-.0002	.0007	.0007	.0005	.0000
04.5	00.0	0.257	.0449	-.0110	0.001	-.0003	.0006	.0007	.0005	.0000
09.0	00.0	0.538	.1085	-.0349	0.001	-.0001	.0002	.0013	.0006	.0000
03.4	-04.0	0.188	.0350	-.0047	0.041	-.0154	.0080	.0012	.0004	.0000
03.4	-02.0	0.189	.0351	-.0046	0.020	-.0073	.0042	.0012	.0004	.0000
03.4	00.0	0.188	.0359	-.0041	0.000	-.0005	.0006	.0008	.0004	.0000
03.4	01.9	0.182	.0353	-.0034	-0.019	.0063	-.0029	.0009	.0005	.0000
03.4	03.9	0.180	.0351	-.0031	-0.042	.0148	-.0067	.0011	.0005	.0000
03.4	05.9	0.177	.0349	-.0026	-0.067	.0248	-.0106	.0013	.0005	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(b) Mass-flow configuration N_{1B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ - Continued 

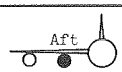
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_ℓ	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.25										
-04.4	00.0	-0.229	.0404	.0423	0.000	-.0007	-.0009	.0058	.0008	.0000
-02.1	00.0	-0.111	.0281	.0284	-0.001	-.0003	-.0014	.0055	.0008	.0000
00.0	00.0	0.004	.0247	.0119	-0.002	.0004	-.0014	.0052	.0008	.0000
02.3	00.0	0.124	.0295	-.0039	-0.002	.0007	-.0009	.0050	.0009	.0000
04.5	00.0	0.247	.0430	-.0184	-0.001	.0002	-.0002	.0054	.0010	.0000
09.0	00.0	0.491	.1010	-.0401	0.001	-.0003	.0001	.0059	.0011	.0000
03.4	-04.0	0.183	.0341	-.0087	0.042	-.0164	.0069	.0059	.0010	.0000
03.4	-02.0	0.187	.0348	-.0102	0.019	-.0075	.0030	.0058	.0009	.0000
03.4	00.0	0.186	.0347	-.0112	-0.002	.0004	-.0005	.0056	.0010	.0000
03.4	01.9	0.183	.0344	-.0121	-0.023	.0082	-.0041	.0056	.0010	.0000
03.4	03.9	0.184	.0345	-.0134	-0.047	.0175	-.0079	.0057	.0010	.0000
03.4	05.9	0.182	.0341	-.0131	-0.071	.0274	-.0114	.0058	.0011	.0000
M = 1.40										
-04.3	00.0	-0.202	.0385	.0354	0.000	-.0003	-.0002	.0053	.0007	.0000
-02.1	00.0	-0.093	.0279	.0232	0.000	-.0002	-.0008	.0052	.0008	.0000
00.0	00.0	0.014	.0250	.0074	-0.001	.0003	-.0011	.0051	.0008	.0000
02.2	00.0	0.121	.0290	-.0067	-0.002	.0010	-.0012	.0049	.0009	.0000
04.5	00.0	0.237	.0422	-.0204	-0.002	.0011	-.0013	.0049	.0010	.0000
09.0	00.0	0.457	.0948	-.0428	-0.002	.0016	-.0011	.0054	.0011	.0000
03.4	-04.0	0.176	.0334	-.0121	0.043	-.0171	.0051	.0054	.0010	.0000
03.4	-02.0	0.178	.0336	-.0131	0.019	-.0076	.0018	.0054	.0010	.0000
03.4	00.0	0.176	.0334	-.0133	-0.003	.0011	-.0012	.0053	.0010	.0000
03.4	01.9	0.172	.0334	-.0131	-0.024	.0095	-.0040	.0052	.0010	.0000
03.4	03.9	0.170	.0331	-.0133	-0.048	.0190	-.0072	.0053	.0011	.0000
03.4	05.9	0.167	.0328	-.0127	-0.073	.0285	-.0102	.0055	.0011	.0000
M = 1.60										
-04.2	00.0	-0.174	.0358	.0285	0.000	-.0010	.0016	.0046	.0009	.0000
-02.1	00.0	-0.081	.0272	.0169	0.000	-.0013	.0011	.0044	.0009	.0000
00.0	00.0	0.011	.0246	.0048	0.000	-.0013	.0005	.0043	.0010	.0000
02.1	00.0	0.105	.0283	-.0080	0.000	-.0011	.0004	.0044	.0010	.0000
04.3	00.0	0.203	.0387	-.0197	0.001	-.0006	-.0001	.0044	.0010	.0000
08.6	00.0	0.399	.0824	-.0409	-0.000	.0007	-.0009	.0045	.0010	.0000
03.2	-06.0	0.150	.0322	-.0116	0.065	-.0260	.0075	.0050	.0010	.0000
03.2	-04.0	0.150	.0322	-.0125	0.043	-.0175	.0052	.0048	.0010	.0000
03.2	-02.0	0.149	.0322	-.0124	0.021	-.0087	.0026	.0046	.0010	.0000
03.2	00.0	0.156	.0326	-.0136	0.001	-.0007	.0001	.0044	.0010	.0000
03.3	02.0	0.158	.0326	-.0142	-0.021	.0077	-.0026	.0044	.0010	.0000
03.3	04.0	0.157	.0326	-.0137	-0.044	.0166	-.0050	.0047	.0010	.0000
03.3	06.0	0.157	.0325	-.0130	-0.067	.0253	-.0076	.0050	.0011	.0000
03.3	08.0	0.159	.0324	-.0121	-0.089	.0327	-.0098	.0053	.0011	.0000
M = 2.00										
-04.2	00.0	-0.146	.0337	.0205	-0.003	.0005	.0016	.0036	.0006	.0000
-02.0	-00.1	-0.065	.0258	.0117	-0.002	.0003	.0017	.0035	.0006	.0000
00.0	-00.1	0.015	.0238	.0011	-0.002	.0005	.0014	.0035	.0006	.0000
02.1	-00.1	0.096	.0279	-.0082	-0.002	.0008	.0010	.0034	.0006	.0000
04.2	-00.1	0.180	.0376	-.0170	-0.002	.0010	.0006	.0035	.0006	.0000
08.5	-00.1	0.341	.0754	-.0330	-0.001	.0013	-.0004	.0036	.0006	.0000
03.1	-06.1	0.134	.0319	-.0132	0.051	-.0155	.0063	.0039	.0007	.0000
03.1	-04.1	0.136	.0320	-.0130	0.033	-.0098	.0046	.0037	.0006	.0000
03.2	-02.1	0.136	.0320	-.0127	0.014	-.0042	.0026	.0036	.0006	.0000
03.2	-00.1	0.137	.0319	-.0127	-0.001	.0009	.0008	.0035	.0006	.0000
03.2	01.8	0.142	.0321	-.0130	-0.019	.0062	-.0010	.0036	.0006	.0000
03.2	03.8	0.138	.0319	-.0122	-0.037	.0114	-.0029	.0038	.0006	.0000
03.2	05.9	0.136	.0317	-.0113	-0.056	.0164	-.0047	.0041	.0007	.0000
03.2	07.9	0.136	.0316	-.0113	-0.078	.0219	-.0064	.0044	.0007	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(b) Mass-flow configuration N_{1B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ - Concluded 

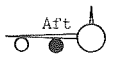
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
				M = 2.50						
-07.3	00.0	-0.220	.0466	.0238	-0.002	.0003	.0011	.0037	.0005	.0000
-04.3	00.0	-0.125	.0299	.0144	-0.002	-.0002	.0016	.0036	.0005	.0000
-02.2	00.0	-0.060	.0231	.0088	-0.001	-.0005	.0013	.0035	.0005	.0000
-00.1	00.0	0.009	.0218	-.0005	-0.002	-.0004	.0018	.0036	.0004	.0000
01.9	00.0	0.076	.0251	-.0077	-0.002	-.0005	.0018	.0036	.0004	.0000
04.0	00.0	0.144	.0334	-.0140	-0.002	-.0004	.0018	.0037	.0004	.0000
08.2	00.0	0.276	.0648	-.0250	-0.001	-.0006	.0011	.0039	.0004	.0000
02.9	-06.0	0.110	.0291	-.0120	0.045	-.0093	.0058	.0037	.0004	.0000
02.9	-04.0	0.111	.0288	-.0120	0.028	-.0065	.0044	.0037	.0004	.0000
02.9	-02.0	0.109	.0286	-.0112	0.013	-.0034	.0031	.0037	.0004	.0000
02.9	00.0	0.111	.0286	-.0110	-0.002	-.0004	.0019	.0037	.0004	.0000
02.9	02.0	0.110	.0286	-.0110	-0.018	.0028	.0005	.0037	.0004	.0000
02.9	04.0	0.109	.0287	-.011ρ	-0.033	.0061	-.0009	.0037	.0004	.0000
02.9	06.0	0.108	.0288	-.0108	-0.050	.0090	-.0024	.0038	.0004	.0000
02.9	08.0	0.106	.0288	-.0107	-0.069	.0118	-.0036	.0038	.0004	.0000
				M = 3.00						
-08.4	00.1	-0.216	.0498	.0197	-0.002	.0005	.0010	.0032	.0003	.0000
-04.3	00.1	-0.104	.0265	.0095	-0.002	-.0003	.0014	.0031	.0003	.0000
-02.1	00.1	-0.047	.0212	.0045	-0.001	-.0006	.0015	.0030	.0003	.0000
-00.1	00.1	0.012	.0200	-.0013	-0.001	-.0006	.0018	.0030	.0003	.0000
01.9	00.1	0.069	.0236	-.0063	-0.001	-.0007	.0020	.0029	.0003	.0000
04.0	00.1	0.127	.0313	-.0107	-0.002	-.0007	.0021	.0030	.0003	.0000
08.1	00.1	0.241	.0592	-.0200	-0.002	-.0011	.0020	.0031	.0002	.0000
02.8	-06.0	0.097	.0272	-.0091	0.043	-.0057	.0056	.0031	.0003	.0000
02.8	-04.0	0.096	.0270	-.0087	0.026	-.0040	.0044	.0031	.0003	.0000
02.9	-01.9	0.096	.0268	-.0083	0.012	-.0023	.0032	.0031	.0003	.0000
02.9	00.1	0.098	.0268	-.0085	-0.002	-.0007	.0020	.0030	.0003	.0000
03.0	02.1	0.097	.0269	-.0085	-0.017	.0011	.0008	.0030	.0003	.0000
03.0	04.2	0.097	.0272	-.0088	-0.030	.0030	-.0003	.0030	.0003	.0000
03.1	06.3	0.096	.0274	-.0089	-0.047	.0047	-.0014	.0030	.0003	.0000
03.1	08.3	0.095	.0278	-.0092	-0.067	.0070	-.0024	.0031	.0003	.0000
				M = 3.50						
-04.2	00.0	-0.088	.0236	.0058	-0.002	-.0001	.0014	.0024	.0002	.0000
-02.2	00.0	-0.038	.0192	.0021	-0.002	-.0005	.0016	.0024	.0002	.0000
-00.1	00.0	0.012	.0184	-.0020	-0.001	-.0008	.0018	.0023	.0002	.0000
01.9	00.0	0.062	.0219	-.0059	-0.001	-.0010	.0020	.0023	.0002	.0000
03.9	00.0	0.113	.0292	-.0092	-0.002	-.0010	.0022	.0023	.0002	.0000
08.1	00.0	0.213	.0543	-.0155	-0.002	-.0014	.0021	.0024	.0001	.0000
02.5	-06.4	0.086	.0253	-.0069	0.044	-.0047	.0054	.0024	.0002	.0000
02.6	-04.2	0.086	.0251	-.0072	0.027	-.0038	.0044	.0024	.0002	.0000
02.8	-02.1	0.087	.0250	-.0073	0.012	-.0025	.0032	.0024	.0002	.0000
02.9	00.0	0.087	.0251	-.0075	-0.002	-.0010	.0021	.0023	.0002	.0000
03.0	02.1	0.088	.0253	-.0076	-0.016	.0007	.0011	.0023	.0002	.0000
03.2	04.3	0.087	.0256	-.0080	-0.031	.0020	.0000	.0023	.0002	.0000
03.3	06.4	0.087	.0259	-.0084	-0.046	.0025	-.0009	.0024	.0001	.0000
03.4	08.6	0.086	.0265	-.0082	-0.065	.0034	-.0019	.0024	.0001	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(c) Mass-flow configuration N_{1C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ 

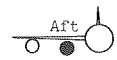
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.2	00.0	-0.225	.0333	.0167	-0.001	-.0006	.0005	.0016	.0002	.0000
-02.1	00.0	-0.122	.0225	.0172	0.000	-.0005	.0005	.0015	.0002	.0000
00.0	00.0	-0.022	.0187	.0153	0.000	-.0002	.0003	.0018	.0003	.0000
02.1	00.0	0.084	.0217	.0154	0.000	-.0001	.0001	.0016	.0002	.0000
04.3	00.0	0.193	.0322	.0176	0.001	-.0002	.0000	.0016	.0002	.0000
08.7	00.0	0.414	.0792	.0285	0.002	.0001	-.0005	.0019	.0003	.0000
03.2	-04.0	0.137	.0254	.0165	0.037	-.0137	.0064	.0018	.0002	.0000
03.2	-02.0	0.140	.0259	.0161	0.017	-.0065	.0031	.0018	.0002	.0000
03.2	00.0	0.139	.0261	.0159	0.000	-.0003	.0001	.0018	.0002	.0000
03.2	01.9	0.136	.0260	.0155	-0.018	.0057	-.0028	.0018	.0002	.0000
03.2	03.9	0.135	.0257	.0150	-0.039	.0132	-.0059	.0021	.0003	.0000
03.2	05.9	0.132	.0252	.0152	-0.062	.0217	-.0090	.0022	.0004	.0000
					M = 0.85					
-04.4	00.0	-0.245	.0357	.0241	-0.001	-.0005	.0007	.0016	.0001	.0000
-02.1	00.0	-0.133	.0230	.0216	0.000	-.0005	.0005	.0016	.0002	.0000
00.0	00.0	-0.022	.0189	.0172	0.000	-.0001	.0004	.0017	.0002	.0000
02.2	00.0	0.092	.0218	.0153	0.000	.0000	.0002	.0018	.0002	.0000
04.4	00.0	0.212	.0338	.0153	0.000	-.0001	.0000	.0018	.0002	.0000
08.9	00.0	0.451	.0871	.0239	0.001	.0002	-.0006	.0022	.0003	.0000
03.3	-04.0	0.152	.0264	.0157	0.038	-.0144	.0072	.0021	.0002	.0000
03.3	-02.0	0.153	.0263	.0152	0.018	-.0067	.0036	.0021	.0002	.0000
03.3	00.0	0.150	.0262	.0152	-0.000	-.0002	.0001	.0020	.0002	.0000
03.3	01.9	0.147	.0262	.0147	-0.019	.0062	-.0031	.0019	.0002	.0000
03.3	03.9	0.147	.0262	.0142	-0.040	.0140	-.0065	.0021	.0002	.0000
03.3	05.9	0.145	.0259	.0145	-0.062	.0229	-.0101	.0023	.0003	.0000
					M = 0.95					
-04.4	00.0	-0.269	.0400	.0391	0.000	-.0007	.0010	.0016	.0000	.0000
-02.2	00.0	-0.132	.0254	.0253	-0.001	-.0004	.0007	.0015	.0000	.0000
00.0	00.0	-0.011	.0206	.0138	0.000	-.0002	.0007	.0016	.0001	.0000
02.2	00.0	0.113	.0241	.0096	0.000	-.0001	.0004	.0017	.0001	.0000
04.5	00.0	0.247	.0386	.0036	0.001	-.0002	.0000	.0018	.0001	.0000
09.0	00.0	0.514	.1025	-.0035	0.001	.0002	-.0009	.0017	.0002	.0000
					M = 1.00					
-04.4	00.0	-0.277	.0474	.0529	-0.001	-.0004	-.0015	.0009	.0006	.0000
-02.1	00.0	-0.151	.0324	.0389	-0.002	.0000	-.0005	.0010	.0006	.0000
00.0	00.0	-0.023	.0278	.0218	-0.001	.0000	.0009	.0006	.0005	.0000
02.2	00.0	0.111	.0312	.0058	-0.001	-.0001	.0009	.0006	.0005	.0000
04.5	00.0	0.252	.0454	-.0100	0.000	-.0003	.0007	.0007	.0005	.0000
09.0	00.0	0.535	.1097	-.0352	0.001	-.0002	.0001	.0014	.0008	.0000
03.4	-04.0	0.184	.0364	-.0034	0.040	-.0153	.0081	.0010	.0005	.0000
03.4	-02.0	0.185	.0363	-.0032	0.019	-.0071	.0044	.0010	.0005	.0000
03.4	00.0	0.182	.0363	-.0023	0.000	-.0003	.0008	.0009	.0005	.0000
03.4	01.9	0.178	.0367	-.0015	-0.020	.0063	-.0027	.0007	.0005	.0000
03.4	03.9	0.178	.0362	-.0016	-0.043	.0150	-.0066	.0012	.0006	.0000
03.4	05.9	0.175	.0359	-.0012	-0.067	.0245	-.0106	.0013	.0006	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(c) Mass-flow configuration N_{1C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Continued 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.3	00.0	-0.225	.0425	.0434	-0.001	-.0005	-.0014	.0054	.0008	.0000
-02.1	00.0	-0.111	.0306	.0302	-0.001	-.0003	-.0021	.0052	.0008	.0000
00.0	00.0	0.004	.0271	.0140	-0.003	.0004	-.0020	.0050	.0008	.0000
02.3	00.0	0.121	.0312	-.0014	-0.003	.0009	-.0014	.0052	.0009	.0000
04.5	00.0	0.245	.0450	-.0159	-0.002	.0004	-.0005	.0053	.0009	.0000
09.0	00.0	0.486	.1023	-.0376	0.001	-.0004	-.0000	.0058	.0009	.0000
03.4	-04.0	0.183	.0368	-.0063	0.041	-.0164	.0068	.0057	.0009	.0000
03.4	-02.0	0.184	.0368	-.0076	0.018	-.0073	.0028	.0056	.0009	.0000
03.4	00.0	0.183	.0365	-.0089	-0.003	.0007	-.0010	.0054	.0009	.0000
03.4	01.9	0.182	.0367	-.0100	-0.025	.0087	-.0047	.0054	.0010	.0000
03.4	03.9	0.184	.0365	-.0114	-0.049	.0180	-.0086	.0057	.0010	.0000
03.4	05.9	0.182	.0360	-.0114	-0.072	.0278	-.0122	.0059	.0011	.0000
					M = 1.40					
-04.3	00.0	-0.199	.0406	.0364	0.000	.0000	-.0005	.0052	.0007	.0000
-02.1	00.0	-0.094	.0299	.0241	0.000	.0002	-.0012	.0052	.0007	.0000
00.0	00.0	0.009	.0266	.0095	-0.002	.0006	-.0018	.0052	.0007	.0000
02.3	00.0	0.120	.0310	-.0051	-0.003	.0013	-.0020	.0050	.0008	.0000
04.5	00.0	0.234	.0440	-.0185	-0.003	.0016	-.0019	.0049	.0008	.0000
08.9	-00.1	0.452	.0959	-.0405	-0.003	.0023	-.0016	.0052	.0008	.0000
03.4	-04.0	0.176	.0361	-.0107	0.042	-.0167	.0046	.0053	.0007	.0000
03.4	-02.0	0.179	.0364	-.0119	0.019	-.0073	.0013	.0053	.0008	.0000
03.4	00.0	0.177	.0360	-.0121	-0.003	.0013	-.0019	.0052	.0008	.0000
03.4	01.9	0.173	.0358	-.0122	-0.026	.0099	-.0048	.0051	.0009	.0000
03.4	03.9	0.172	.0356	-.0123	-0.050	.0195	-.0080	.0052	.0009	.0000
03.4	05.9	0.170	.0353	-.0119	-0.073	.0289	-.0109	.0054	.0010	.0000
					M = 1.60					
-04.2	00.0	-0.173	.0378	.0289	0.000	-.0012	.0017	.0045	.0006	.0000
-02.1	00.0	-0.079	.0290	.0176	0.001	-.0015	.0011	.0044	.0006	.0000
00.0	00.0	0.013	.0267	.0059	0.001	-.0014	.0002	.0043	.0006	.0000
02.1	00.0	0.107	.0304	-.0068	0.001	-.0007	-.0001	.0043	.0006	.0000
04.3	00.0	0.205	.0410	-.0185	0.001	-.0001	-.0006	.0043	.0007	.0000
08.6	00.0	0.398	.0848	-.0394	0.000	.0013	-.0017	.0045	.0007	.0000
03.2	-06.0	0.154	.0345	-.0104	0.064	-.0256	.0070	.0050	.0006	.0000
03.2	-04.0	0.153	.0347	-.0114	0.041	-.0168	.0047	.0047	.0006	.0000
03.2	-02.0	0.153	.0346	-.0120	0.020	-.0082	.0023	.0045	.0006	.0000
03.2	00.0	0.155	.0347	-.0128	0.001	-.0003	-.0002	.0044	.0006	.0000
03.2	02.0	0.159	.0348	-.0131	-0.021	.0079	-.0030	.0044	.0007	.0000
03.2	04.0	0.159	.0346	-.0125	-0.044	.0168	-.0054	.0046	.0007	.0000
03.3	06.0	0.156	.0342	-.0123	-0.066	.0252	-.0080	.0050	.0008	.0000
03.3	08.0	0.158	.0342	-.0112	-0.090	.0329	-.0102	.0054	.0008	.0000
					M = 2.00					
-04.1	00.0	-0.143	.0340	.0220	-0.002	.0007	.0017	.0037	.0005	.0000
-02.0	-00.1	-0.061	.0279	.0124	-0.001	.0004	.0018	.0035	.0006	.0000
00.0	-00.1	0.019	.0263	.0022	-0.001	.0005	.0013	.0035	.0006	.0000
02.1	-00.1	0.100	.0306	-.0070	-0.001	.0009	.0007	.0035	.0006	.0000
04.3	-00.1	0.182	.0408	-.0158	-0.001	.0011	.0002	.0036	.0006	.0000
08.5	-00.1	0.342	.0785	-.0317	0.000	.0020	-.0009	.0037	.0005	.0000
03.2	-06.1	0.139	.0353	-.0122	0.053	-.0162	.0063	.0039	.0007	.0000
03.2	-04.1	0.141	.0351	-.0119	0.034	-.0102	.0044	.0038	.0007	.0000
03.2	-02.1	0.139	.0348	-.0116	0.015	-.0044	.0024	.0036	.0006	.0000
03.2	-00.1	0.141	.0348	-.0115	-0.001	.0012	.0005	.0036	.0006	.0000
03.2	01.8	0.143	.0349	-.0116	-0.018	.0065	-.0014	.0037	.0006	.0000
03.2	03.8	0.142	.0348	-.0112	-0.037	.0116	-.0034	.0039	.0006	.0000
03.2	05.9	0.139	.0343	-.0104	-0.056	.0165	-.0052	.0042	.0007	.0000
03.3	07.9	0.137	.0341	-.0103	-0.079	.0219	-.0068	.0043	.0007	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(c) Mass-flow configuration N_{1C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 2.50					
-04.3	00.0	-0.119	.0313	.0152	0.000	-.0007	.0017	.0036	.0006	.0000
-02.2	00.0	-0.054	.0255	.0086	0.000	-.0010	.0016	.0036	.0006	.0000
-00.1	00.0	0.014	.0244	.0005	0.000	-.0011	.0018	.0036	.0006	.0000
01.9	00.0	0.081	.0282	-.0065	0.000	-.0011	.0017	.0037	.0006	.0000
04.0	00.0	0.148	.0365	-.0128	0.000	-.0010	.0015	.0038	.0006	.0000
08.2	00.0	0.279	.0683	-.0237	0.001	-.0009	.0006	.0038	.0005	.0000
02.9	-06.0	0.115	.0326	-.0108	0.047	-.0102	.0058	.0036	.0006	.0000
02.9	-04.0	0.115	.0323	-.0107	0.030	-.0071	.0044	.0037	.0006	.0000
02.9	-02.0	0.114	.0319	-.0101	0.015	-.0040	.0030	.0037	.0006	.0000
02.9	00.0	0.115	.0317	-.0097	0.000	-.0011	.0016	.0037	.0006	.0000
02.9	02.0	0.114	.0315	-.0096	-0.015	.0021	.0000	.0037	.0006	.0000
02.9	04.0	0.112	.0313	-.0094	-0.030	.0053	-.0014	.0037	.0006	.0000
02.9	06.0	0.110	.0311	-.0091	-0.047	.0083	-.0028	.0037	.0006	.0000
02.9	08.0	0.107	.0309	-.0092	-0.067	.0115	-.0041	.0038	.0006	.0000
					M = 3.00					
-04.2	00.1	-0.097	.0285	.0104	0.001	-.0009	.0016	.0031	.0005	.0000
-02.2	00.1	-0.040	.0236	.0054	0.001	-.0013	.0016	.0030	.0005	.0000
-00.1	00.1	0.018	.0233	-.0003	0.001	-.0015	.0017	.0030	.0005	.0000
01.9	00.1	0.075	.0272	-.0051	0.001	-.0016	.0017	.0029	.0005	.0000
04.0	00.1	0.131	.0349	-.0093	0.001	-.0016	.0016	.0030	.0004	.0000
08.1	00.1	0.244	.0629	-.0185	0.002	-.0019	.0013	.0031	.0004	.0000
02.8	-06.0	0.103	.0314	-.0079	0.046	-.0068	.0057	.0031	.0004	.0000
02.8	-04.0	0.103	.0310	-.0079	0.029	-.0049	.0044	.0031	.0005	.0000
02.9	-01.9	0.102	.0307	-.0072	0.014	-.0032	.0030	.0031	.0005	.0000
02.9	00.1	0.102	.0303	-.0071	0.000	-.0016	.0016	.0030	.0004	.0000
03.0	02.1	0.101	.0303	-.0069	-0.013	.0002	.0003	.0030	.0004	.0000
03.0	04.2	0.099	.0303	-.0068	-0.028	.0022	-.0009	.0030	.0004	.0000
03.1	06.3	0.097	.0300	-.0067	-0.044	.0043	-.0021	.0031	.0004	.0000
03.1	08.3	0.096	.0304	-.0070	-0.064	.0067	-.0032	.0032	.0004	.0000
04.8	-06.0	0.160	.0407	-.0129	0.046	-.0049	.0055	.0031	.0004	.0000
04.9	-01.9	0.157	.0403	-.0116	0.015	-.0027	.0029	.0031	.0004	.0000
05.0	00.1	0.158	.0402	-.0115	0.001	-.0017	.0017	.0031	.0004	.0000
05.0	02.1	0.158	.0401	-.0111	-0.013	-.0005	.0002	.0031	.0004	.0000
05.1	06.3	0.154	.0397	-.0118	-0.044	.0023	-.0024	.0031	.0004	.0000
05.2	08.3	0.153	.0396	-.0116	-0.065	.0049	-.0038	.0032	.0004	.0000
					M = 3.50					
-04.2	00.0	-0.082	.0256	.0070	0.001	-.0008	.0016	.0024	.0003	.0000
-02.2	00.0	-0.032	.0219	.0033	0.001	-.0013	.0015	.0024	.0003	.0000
-00.1	00.0	0.017	.0223	-.0004	0.000	-.0016	.0016	.0024	.0003	.0000
01.9	00.0	0.066	.0257	-.0037	0.001	-.0017	.0016	.0023	.0003	.0000
03.9	00.0	0.116	.0332	-.0072	0.001	-.0017	.0016	.0023	.0003	.0000
08.0	00.0	0.212	.0582	-.0131	0.002	-.0024	.0012	.0024	.0003	.0000
02.5	-06.4	0.093	.0303	-.0069	0.045	-.0055	.0060	.0024	.0003	.0000
02.6	-04.2	0.092	.0296	-.0060	0.030	-.0045	.0044	.0024	.0003	.0000
02.8	-02.1	0.092	.0292	-.0056	0.015	-.0032	.0030	.0024	.0003	.0000
02.9	00.0	0.091	.0289	-.0053	0.001	-.0017	.0016	.0024	.0003	.0000
03.0	02.1	0.090	.0287	-.0053	-0.014	.0001	.0003	.0024	.0003	.0000
03.2	04.3	0.088	.0285	-.0051	-0.028	.0016	-.0009	.0024	.0003	.0000
03.3	06.4	0.087	.0286	-.0053	-0.044	.0024	-.0019	.0024	.0003	.0000
03.4	08.6	0.086	.0292	-.0051	-0.061	.0033	-.0029	.0024	.0003	.0000

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(d) Mass-flow configuration N_{1D}; $m_I/m_\infty = 1.0$, $m_O/m_\infty \approx 0.3$ 

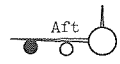
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.60										
-04.2	00.0	-0.182	.0362	.0287	-0.002	-.0005	.0010	.0046	.0000	.0009
-02.1	00.0	-0.085	.0268	.0157	-0.001	-.0006	.0009	.0045	.0000	.0009
00.0	00.0	0.006	.0240	.0030	-0.001	-.0005	.0006	.0044	.0000	.0010
02.1	00.0	0.099	.0274	-.0092	-0.001	-.0002	.0004	.0044	.0000	.0010
04.2	00.0	0.198	.0379	-.0215	-0.001	.0002	.0000	.0044	.0000	.0010
08.6	00.0	0.393	.0815	-.0432	-0.002	.0013	-.0005	.0046	.0000	.0011
03.2	-06.0	0.144	.0311	-.0135	0.064	-.0255	.0073	.0050	.0000	.0010
03.2	-04.0	0.145	.0315	-.0146	0.042	-.0167	.0050	.0047	.0000	.0010
03.2	-02.0	0.145	.0316	-.0147	0.019	-.0079	.0026	.0045	.0000	.0010
03.2	00.0	0.149	.0318	-.0155	-0.001	.0001	.0003	.0044	.0000	.0010
03.2	01.9	0.154	.0321	-.0162	-0.023	.0087	-.0022	.0045	.0000	.0010
03.2	03.9	0.153	.0320	-.0160	-0.047	.0178	-.0045	.0047	.0000	.0010
03.3	06.0	0.154	.0320	-.0163	-0.068	.0259	-.0068	.0051	.0000	.0011
03.3	08.0	0.156	.0320	-.0160	-0.093	.0337	-.0089	.0054	.0000	.0011
M = 2.00										
-04.2	-00.1	-0.151	.0332	.0215	-0.004	.0012	.0011	.0038	.0000	.0006
-02.1	-00.1	-0.071	.0251	.0122	-0.003	.0012	.0008	.0037	.0000	.0006
00.0	-00.1	0.007	.0226	.0015	-0.003	.0011	.0005	.0037	.0000	.0007
02.1	-00.1	0.087	.0259	-.0086	-0.003	.0013	.0004	.0037	.0000	.0007
04.2	-00.1	0.171	.0353	-.0180	-0.002	.0014	.0001	.0037	.0000	.0007
08.4	-00.1	0.334	.0724	-.0353	-0.002	.0018	-.0005	.0040	.0000	.0007
03.2	-06.1	0.126	.0302	-.0127	0.049	-.0144	.0055	.0039	.0000	.0007
03.1	-04.1	0.128	.0300	-.0130	0.031	-.0086	.0038	.0039	.0000	.0007
03.2	-02.1	0.128	.0299	-.0131	0.013	-.0033	.0019	.0038	.0000	.0007
03.1	-00.1	0.131	.0299	-.0137	-0.001	.0011	.0004	.0038	.0000	.0007
03.2	01.8	0.135	.0304	-.0141	-0.018	.0056	-.0013	.0038	.0000	.0007
03.2	03.8	0.133	.0305	-.0139	-0.034	.0098	-.0031	.0039	.0000	.0007
03.2	05.9	0.133	.0308	-.0136	-0.053	.0141	-.0049	.0042	.0000	.0007
03.2	07.9	0.131	.0305	-.0140	-0.074	.0191	-.0064	.0044	.0000	.0007
M = 2.50										
-04.3	00.0	-0.126	.0303	.0139	0.002	-.0024	.0015	.0037	.0000	.0004
-02.2	00.0	-0.063	.0235	.0077	0.002	-.0026	.0012	.0036	.0000	.0004
-00.1	00.0	0.002	.0208	.0002	0.003	-.0029	.0009	.0037	.0000	.0004
01.9	00.0	0.069	.0235	-.0070	0.004	-.0030	.0005	.0037	.0000	.0004
04.0	00.0	0.136	.0311	-.0134	0.004	-.0030	.0001	.0037	.0000	.0004
08.2	00.0	0.268	.0608	-.0253	0.005	-.0029	-.0007	.0039	.0000	.0004
02.9	-06.0	0.101	.0271	-.0102	0.049	-.0102	.0041	.0038	.0000	.0004
02.9	-04.0	0.101	.0268	-.0106	0.032	-.0079	.0028	.0038	.0000	.0004
02.9	-02.0	0.101	.0266	-.0103	0.018	-.0054	.0016	.0038	.0000	.0004
02.9	00.0	0.103	.0266	-.0103	0.004	-.0030	.0003	.0038	.0000	.0004
02.9	02.0	0.102	.0266	-.0106	-0.011	-.0003	-.0011	.0037	.0000	.0004
02.9	04.0	0.103	.0266	-.0111	-0.027	.0030	-.0025	.0037	.0000	.0004
02.9	06.0	0.101	.0267	-.0114	-0.044	.0065	-.0038	.0037	.0000	.0005
02.9	08.0	0.101	.0268	-.0116	-0.064	.0097	-.0049	.0038	.0000	.0005

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(d) Mass-flow configuration N_{1D}; $m_I/m_\infty = 1.0$, $m_O/m_\infty \approx 0.3$ - Concluded 

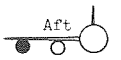
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 3.00										
-04.3	00.1	-0.105	.0276	.0087	0.001	-.0020	.0013	.0029	.0000	.0003
-02.2	00.1	-0.051	.0215	.0043	0.002	-.0022	.0011	.0029	.0000	.0002
-00.1	00.1	0.005	.0192	-.0010	0.003	-.0025	.0008	.0029	.0000	.0003
01.9	00.1	0.061	.0217	-.0057	0.004	-.0029	.0004	.0029	.0000	.0002
03.9	00.1	0.117	.0285	-.0099	0.004	-.0033	.0001	.0029	.0000	.0003
08.1	00.1	0.231	.0543	-.0191	0.006	-.0036	-.0007	.0029	.0000	.0003
02.8	-06.0	0.088	.0253	-.0080	0.049	-.0086	.0040	.0031	.0000	.0002
02.8	-03.9	0.088	.0248	-.0078	0.033	-.0072	.0029	.0032	.0000	.0003
02.9	-01.9	0.088	.0245	-.0076	0.018	-.0053	.0016	.0031	.0000	.0003
02.9	00.1	0.089	.0245	-.0078	0.004	-.0031	.0003	.0029	.0000	.0003
03.0	02.1	0.089	.0246	-.0079	-0.011	-.0006	-.0010	.0029	.0000	.0003
03.0	04.2	0.089	.0249	-.0083	-0.026	.0015	-.0022	.0030	.0000	.0003
03.1	06.3	0.088	.0250	-.0085	-0.043	.0035	-.0033	.0031	.0000	.0003
03.1	08.3	0.087	.0252	-.0085	-0.063	.0059	-.0043	.0032	.0000	.0003
M = 3.50										
-04.2	00.0	-0.091	.0249	.0050	0.002	-.0019	.0015	.0024	.0000	.0002
-02.2	00.0	-0.043	.0197	.0020	0.002	-.0020	.0012	.0023	.0000	.0002
-00.1	00.0	0.005	.0180	-.0016	0.002	-.0021	.0008	.0022	.0000	.0001
01.9	00.0	0.054	.0202	-.0050	0.003	-.0022	.0004	.0022	.0000	.0002
03.9	00.0	0.102	.0262	-.0080	0.003	-.0022	-.0001	.0022	.0000	.0001
08.0	00.0	0.199	.0487	-.0139	0.004	-.0024	-.0009	.0022	.0000	.0001
02.5	-06.3	0.077	.0234	-.0069	0.049	-.0074	.0041	.0023	.0000	.0001
02.6	-04.2	0.077	.0230	-.0065	0.032	-.0062	.0028	.0024	.0000	.0001
02.7	-02.1	0.077	.0225	-.0063	0.017	-.0040	.0014	.0024	.0000	.0001
02.9	00.0	0.077	.0225	-.0064	0.003	-.0022	.0001	.0023	.0000	.0001
03.0	02.1	0.077	.0226	-.0065	-0.012	-.0004	-.0010	.0023	.0000	.0002
03.2	04.3	0.077	.0229	-.0067	-0.027	.0010	-.0022	.0023	.0000	.0002
03.3	06.4	0.076	.0231	-.0069	-0.042	.0017	-.0031	.0023	.0000	.0002
03.4	08.6	0.075	.0235	-.0063	-0.061	.0028	-.0040	.0024	.0000	.0002

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(e) Mass-flow configuration N_{1E}; $m_I/m_\infty = 1.0$, $m_0/m_\infty = 0$ 

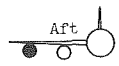
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_0}}$
M = 0.65										
-04.3	00.0	-0.220	.0329	.0138	-0.001	-.0014	.0004	.0016	.0000	.0005
-02.1	00.0	-0.115	.0223	.0137	0.000	-.0012	.0005	.0015	.0000	.0004
00.0	00.0	-0.019	.0183	.0120	0.001	-.0010	.0004	.0017	.0000	.0003
02.1	00.0	0.083	.0210	.0124	0.000	-.0007	-.0001	.0016	.0000	.0002
04.3	00.0	0.191	.0316	.0146	0.000	-.0008	-.0005	.0017	.0000	.0003
08.7	00.0	0.410	.0787	.0267	0.001	-.0004	-.0022	.0017	.0000	.0006
03.2	-04.0	0.137	.0244	.0134	0.039	-.0146	.0059	.0023	.0000	.0004
03.2	-02.0	0.139	.0251	.0133	0.018	-.0071	.0027	.0020	.0000	.0003
03.2	00.0	0.137	.0253	.0131	0.001	-.0009	-.0003	.0019	.0000	.0003
03.2	01.9	0.132	.0252	.0129	-0.017	.0050	-.0030	.0019	.0000	.0003
03.2	03.9	0.132	.0250	.0126	-0.038	.0125	-.0062	.0019	.0000	.0003
03.2	05.9	0.128	.0242	.0128	-0.060	.0211	-.0093	.0023	.0000	.0004
M = 0.85										
-04.4	00.0	-0.247	.0354	.0215	-0.001	-.0016	.0005	.0018	.0000	.0005
-02.1	00.0	-0.128	.0227	.0183	0.000	-.0013	.0007	.0017	.0000	.0004
00.0	00.0	-0.021	.0185	.0140	0.001	-.0010	.0005	.0019	.0000	.0003
02.2	00.0	0.094	.0219	.0125	0.000	-.0008	-.0001	.0018	.0000	.0002
04.4	00.0	0.211	.0341	.0126	0.000	-.0008	-.0006	.0019	.0000	.0003
08.9	00.0	0.448	.0875	.0213	0.000	-.0004	-.0025	.0022	.0000	.0007
03.3	-04.0	0.151	.0256	.0124	0.039	-.0152	.0066	.0023	.0000	.0004
03.3	-02.0	0.153	.0264	.0122	0.018	-.0075	.0030	.0021	.0000	.0003
03.3	00.0	0.151	.0265	.0122	0.000	-.0009	-.0003	.0021	.0000	.0003
03.3	01.9	0.148	.0264	.0121	-0.018	.0054	-.0035	.0021	.0000	.0003
03.3	03.9	0.145	.0261	.0119	-0.040	.0132	-.0070	.0021	.0000	.0003
03.3	05.9	0.142	.0257	.0123	-0.063	.0220	-.0106	.0023	.0000	.0004
M = 1.00										
-04.4	00.0	-0.269	.0458	.0466	-0.001	-.0016	-.0008	.0007	.0000	.0008
-02.2	00.0	-0.138	.0319	.0318	-0.001	-.0013	-.0003	.0006	.0000	.0008
00.0	00.0	-0.012	.0274	.0155	-0.001	-.0010	.0003	.0007	.0000	.0007
02.2	00.0	0.119	.0317	.0002	-0.001	-.0009	.0008	.0007	.0000	.0006
04.5	00.0	0.256	.0463	-.0131	-0.001	-.0010	.0010	.0007	.0000	.0007
09.0	00.0	0.533	.1100	-.0355	0.000	-.0010	-.0003	.0010	.0000	.0014
03.4	-04.0	0.192	.0366	-.0096	0.041	-.0166	.0079	.0013	.0000	.0009
03.4	-02.0	0.192	.0371	-.0085	0.020	-.0082	.0045	.0010	.0000	.0008
03.4	00.0	0.187	.0376	-.0070	0.000	-.0012	.0010	.0007	.0000	.0006
03.4	01.9	0.182	.0378	-.0060	-0.021	.0057	-.0026	.0007	.0000	.0005
03.4	03.9	0.180	.0376	-.0055	-0.044	.0142	-.0065	.0009	.0000	.0006
03.4	05.9	0.180	.0369	-.0050	-0.067	.0236	-.0105	.0014	.0000	.0006
M = 1.25										
-04.3	00.0	-0.227	.0419	.0393	0.001	-.0022	-.0002	.0054	.0000	.0007
-02.1	00.0	-0.111	.0298	.0253	0.001	-.0015	-.0004	.0053	.0000	.0007
00.0	00.0	0.002	.0261	.0084	0.000	-.0007	-.0007	.0051	.0000	.0008
02.2	00.0	0.124	.0308	-.0081	-0.003	-.0001	-.0010	.0050	.0000	.0008
04.5	00.0	0.248	.0451	-.0224	-0.003	-.0001	-.0006	.0052	.0000	.0009
09.0	00.0	0.491	.1031	-.0422	-0.002	-.0005	-.0010	.0058	.0000	.0011
03.4	-04.0	0.185	.0359	-.0133	0.042	-.0171	.0067	.0058	.0000	.0009
03.4	-02.0	0.187	.0364	-.0147	0.019	-.0079	.0028	.0055	.0000	.0009
03.4	00.0	0.185	.0362	-.0152	-0.002	-.0001	-.0007	.0055	.0000	.0009
03.4	01.9	0.184	.0365	-.0157	-0.024	.0078	-.0042	.0054	.0000	.0009
03.4	03.9	0.183	.0361	-.0159	-0.048	.0173	-.0078	.0056	.0000	.0009
03.4	05.9	0.180	.0357	-.0151	-0.074	.0278	-.0112	.0059	.0000	.0009

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(e) Mass-flow configuration N_{1E}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 0$ - Continued 

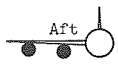
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.40										
-04.4	00.0	-0.209	.0404	.0346	0.001	-.0019	-.0000	.0052	.0000	.0007
-02.1	00.0	-0.097	.0294	.0215	0.001	-.0015	-.0004	.0051	.0000	.0008
00.0	00.0	0.007	.0261	.0064	0.000	-.0006	-.0008	.0052	.0000	.0007
02.2	00.0	0.116	.0303	-.0080	-0.002	.0005	-.0010	.0051	.0000	.0007
04.5	00.0	0.230	.0430	-.0222	-0.003	.0010	-.0011	.0049	.0000	.0007
09.0	00.0	0.454	.0959	-.0461	-0.005	.0020	-.0016	.0054	.0000	.0009
03.4	-04.0	0.170	.0347	-.0148	0.043	-.0176	.0048	.0053	.0000	.0008
03.4	-02.0	0.173	.0350	-.0151	0.020	-.0081	.0018	.0053	.0000	.0008
03.4	00.0	0.171	.0352	-.0148	-0.002	.0007	-.0011	.0051	.0000	.0007
03.3	01.9	0.167	.0352	-.0146	-0.024	.0093	-.0039	.0051	.0000	.0007
03.3	03.9	0.167	.0351	-.0149	-0.049	.0190	-.0068	.0053	.0000	.0008
03.3	05.9	0.166	.0350	-.0146	-0.075	.0291	-.0095	.0056	.0000	.0008
M = 1.60										
-04.2	00.0	-0.181	.0379	.0288	-0.002	-.0010	.0010	.0047	.0000	.0006
-02.0	00.0	-0.086	.0287	.0163	-0.001	-.0009	.0009	.0045	.0000	.0007
00.0	00.0	0.006	.0259	.0032	-0.001	-.0009	.0005	.0044	.0000	.0007
02.1	00.0	0.100	.0295	-.0092	-0.002	-.0002	.0001	.0044	.0000	.0007
04.2	00.0	0.196	.0397	-.0217	-0.001	.0004	-.0004	.0044	.0000	.0007
08.5	00.0	0.392	.0831	-.0430	-0.002	.0016	-.0009	.0047	.0000	.0009
03.2	-06.0	0.144	.0327	-.0129	0.062	-.0253	.0069	.0050	.0000	.0010
03.2	-04.0	0.148	.0335	-.0140	0.042	-.0168	.0047	.0047	.0000	.0008
03.2	-02.0	0.146	.0334	-.0147	0.019	-.0081	.0024	.0045	.0000	.0008
03.2	00.0	0.150	.0338	-.0154	-0.001	-.0000	-.0001	.0044	.0000	.0007
03.2	01.9	0.156	.0341	-.0161	-0.024	.0087	-.0026	.0045	.0000	.0007
03.2	03.9	0.153	.0338	-.0159	-0.047	.0180	-.0049	.0049	.0000	.0007
03.3	06.0	0.157	.0340	-.0157	-0.071	.0265	-.0072	.0052	.0000	.0007
03.3	08.0	0.156	.0338	-.0153	-0.093	.0339	-.0093	.0055	.0000	.0008
M = 2.00										
-04.2	-00.1	-0.151	.0355	.0223	-0.003	.0007	.0012	.0038	.0000	.0006
-02.0	-00.1	-0.070	.0274	.0123	-0.002	.0007	.0010	.0038	.0000	.0006
00.0	-00.1	0.008	.0250	.0016	-0.003	.0010	.0006	.0038	.0000	.0006
02.1	-00.1	0.090	.0284	-.0084	-0.001	.0011	.0004	.0038	.0000	.0006
04.2	-00.1	0.173	.0378	-.0176	-0.002	.0015	.0000	.0038	.0000	.0006
08.5	-00.1	0.336	.0754	-.0346	-0.002	.0021	-.0009	.0040	.0000	.0007
03.1	-06.1	0.128	.0324	-.0128	0.051	-.0152	.0054	.0040	.0000	.0008
03.1	-04.1	0.129	.0324	-.0128	0.032	-.0091	.0037	.0039	.0000	.0008
03.1	-02.1	0.130	.0323	-.0128	0.014	-.0035	.0019	.0039	.0000	.0007
03.1	-00.1	0.133	.0324	-.0134	-0.002	.0014	.0003	.0039	.0000	.0006
03.2	01.8	0.136	.0327	-.0139	-0.018	.0062	-.0015	.0039	.0000	.0006
03.2	03.8	0.135	.0331	-.0135	-0.035	.0103	-.0033	.0041	.0000	.0007
03.2	05.9	0.134	.0333	-.0135	-0.053	.0140	-.0050	.0043	.0000	.0007
03.2	07.9	0.136	.0330	-.0138	-0.074	.0187	-.0065	.0046	.0000	.0007

TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(e) Mass-flow configuration N_{1E}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 2.50										
-04.3	00.0	-0.126	.0328	.0138	0.002	-.0032	.0019	.0037	.0000	.0006
-02.2	00.0	-0.061	.0259	.0075	0.003	-.0034	.0015	.0037	.0000	.0006
-00.1	00.0	0.004	.0234	.0000	0.004	-.0038	.0011	.0037	.0000	.0006
01.9	00.0	0.071	.0260	-.0070	0.004	-.0039	.0006	.0038	.0000	.0006
04.0	00.0	0.137	.0336	-.0134	0.005	-.0039	.0001	.0038	.0000	.0006
08.2	00.0	0.269	.0637	-.0250	0.006	-.0038	-.0010	.0039	.0000	.0006
02.9	-06.0	0.102	.0298	-.0101	0.048	-.0103	.0041	.0038	.0000	.0006
02.9	-04.0	0.103	.0294	-.0105	0.032	-.0082	.0028	.0038	.0000	.0006
02.9	-01.9	0.102	.0291	-.0103	0.018	-.0060	.0016	.0038	.0000	.0006
02.9	00.0	0.104	.0292	-.0103	0.004	-.0039	.0004	.0038	.0000	.0006
02.9	02.0	0.104	.0291	-.0107	-0.009	-.0016	-.0010	.0038	.0000	.0006
02.9	03.9	0.103	.0290	-.0113	-0.026	.0017	-.0024	.0038	.0000	.0006
02.9	06.0	0.102	.0291	-.0116	-0.043	.0053	-.0038	.0038	.0000	.0006
02.9	08.0	0.101	.0293	-.0120	-0.063	.0086	-.0048	.0038	.0000	.0006
M = 3.00										
-04.3	00.1	-0.104	.0300	.0085	0.003	-.0031	.0018	.0030	.0000	.0005
-02.2	00.1	-0.049	.0239	.0039	0.003	-.0035	.0015	.0030	.0000	.0005
-00.1	00.1	0.007	.0218	-.0013	0.004	-.0040	.0011	.0029	.0000	.0005
01.9	00.1	0.062	.0244	-.0059	0.005	-.0043	.0006	.0029	.0000	.0005
04.0	00.1	0.118	.0312	-.0099	0.005	-.0047	.0002	.0029	.0000	.0005
08.1	00.1	0.232	.0572	-.0188	0.007	-.0051	-.0008	.0029	.0000	.0005
02.8	-06.0	0.089	.0281	-.0080	0.049	-.0092	.0040	.0032	.0000	.0004
02.8	-03.9	0.089	.0276	-.0078	0.034	-.0083	.0029	.0032	.0000	.0004
02.9	-01.9	0.089	.0273	-.0076	0.019	-.0067	.0017	.0031	.0000	.0004
02.9	00.0	0.090	.0271	-.0079	0.005	-.0045	.0004	.0030	.0000	.0005
03.0	02.1	0.090	.0273	-.0082	-0.010	-.0020	-.0010	.0029	.0000	.0005
03.0	04.2	0.089	.0276	-.0086	-0.025	.0004	-.0022	.0030	.0000	.0005
03.1	06.3	0.089	.0276	-.0089	-0.042	.0025	-.0032	.0031	.0000	.0005
03.1	08.3	0.087	.0278	-.0088	-0.063	.0049	-.0042	.0032	.0000	.0005
M = 3.50										
-04.2	00.0	-0.089	.0276	.0046	0.001	-.0027	.0019	.0023	.0000	.0004
-02.2	00.0	-0.041	.0223	.0018	0.002	-.0028	.0015	.0023	.0000	.0004
-00.1	00.0	0.006	.0206	-.0017	0.003	-.0031	.0009	.0022	.0000	.0004
01.9	00.0	0.054	.0228	-.0050	0.003	-.0033	.0005	.0022	.0000	.0004
03.9	00.0	0.103	.0288	-.0082	0.003	-.0033	-.0001	.0022	.0000	.0004
08.1	00.0	0.200	.0517	-.0140	0.005	-.0037	-.0010	.0022	.0000	.0003
02.5	-06.3	0.078	.0266	-.0066	0.050	-.0088	.0043	.0023	.0000	.0003
02.6	-04.2	0.077	.0261	-.0064	0.034	-.0078	.0029	.0023	.0000	.0003
02.7	-02.1	0.078	.0254	-.0064	0.018	-.0056	.0015	.0023	.0000	.0003
02.9	00.0	0.079	.0253	-.0067	0.003	-.0033	.0002	.0023	.0000	.0003
03.0	02.1	0.078	.0254	-.0067	-0.012	-.0015	-.0010	.0022	.0000	.0003
03.2	04.3	0.078	.0257	-.0071	-0.027	.0001	-.0021	.0022	.0000	.0003
03.3	06.4	0.077	.0258	-.0073	-0.042	.0008	-.0030	.0023	.0000	.0003
03.4	08.6	0.076	.0263	-.0065	-0.061	.0020	-.0039	.0023	.0000	.0003

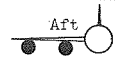
TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(f) Mass-flow configuration N_{1F}; $m_I/m_\infty = 0$, $m_O/m_\infty = 0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.2	00.0	-0.219	.0377	.0166	-0.003	-.0017	.0008	.0015	.0002	.0006
-02.1	00.0	-0.115	.0267	.0166	-0.002	-.0014	.0007	.0016	.0002	.0005
00.0	00.0	-0.019	.0235	.0146	-0.001	-.0011	.0005	.0013	.0002	.0004
02.1	00.0	0.081	.0256	.0149	-0.001	-.0008	-.0001	.0016	.0002	.0003
04.3	00.0	0.190	.0363	.0176	-0.001	-.0009	-.0007	.0016	.0003	.0003
08.7	00.0	0.405	.0824	.0288	0.000	-.0005	-.0027	.0020	.0004	.0006
03.2	-04.0	0.136	.0293	.0164	0.035	-.0143	.0059	.0017	.0002	.0004
03.2	-02.0	0.136	.0294	.0161	0.016	-.0072	.0027	.0019	.0003	.0004
03.2	00.0	0.134	.0295	.0160	-0.001	-.0010	-.0003	.0018	.0003	.0003
03.2	01.9	0.132	.0298	.0157	-0.019	.0050	-.0033	.0017	.0003	.0003
03.2	03.9	0.130	.0296	.0152	-0.039	.0125	-.0064	.0018	.0003	.0003
03.2	06.0	0.127	.0290	.0154	-0.061	.0211	-.0095	.0021	.0004	.0004
					M = 0.85					
-04.3	00.0	-0.243	.0401	.0256	-0.003	-.0019	.0008	.0018	.0002	.0006
-02.1	00.0	-0.127	.0280	.0220	-0.002	-.0016	.0007	.0015	.0002	.0005
00.0	00.0	-0.021	.0235	.0170	-0.001	-.0011	.0005	.0017	.0002	.0004
02.2	00.0	0.093	.0268	.0148	-0.001	-.0008	-.0001	.0017	.0002	.0003
04.4	00.0	0.209	.0388	.0152	-0.001	-.0009	-.0007	.0017	.0002	.0003
08.9	00.0	0.444	.0919	.0233	0.000	-.0004	-.0028	.0022	.0004	.0007
03.3	-04.0	0.151	.0309	.0155	0.036	-.0150	.0067	.0020	.0002	.0004
03.3	-02.0	0.153	.0311	.0151	0.016	-.0075	.0031	.0021	.0002	.0004
03.3	00.0	0.151	.0314	.0149	-0.001	-.0010	-.0004	.0019	.0002	.0003
03.3	01.9	0.149	.0316	.0146	-0.019	.0055	-.0037	.0018	.0002	.0003
03.3	04.0	0.146	.0311	.0144	-0.040	.0134	-.0072	.0022	.0003	.0003
03.3	06.0	0.142	.0308	.0148	-0.063	.0223	-.0108	.0022	.0004	.0003
					M = 0.95					
-02.1	00.0	-0.136	.0301	.0313	0.000	-.0023	-.0000	.0017	.0001	.0003
00.0	00.0	-0.020	.0245	.0196	-0.001	-.0014	.0002	.0017	.0001	.0002
02.2	00.0	0.109	.0280	.0090	-0.002	-.0010	-.0004	.0016	.0001	.0001
					M = 1.00					
-04.3	00.0	-0.274	.0528	.0576	-0.003	-.0020	-.0022	.0006	.0006	.0011
-02.1	00.0	-0.147	.0383	.0416	-0.003	-.0012	-.0013	.0004	.0006	.0010
00.0	00.0	-0.024	.0329	.0228	-0.002	-.0010	.0003	.0004	.0006	.0009
02.2	00.0	0.110	.0367	.0054	-0.003	-.0008	.0010	.0002	.0006	.0008
04.5	00.0	0.249	.0513	-.0109	-0.002	-.0012	.0013	.0002	.0007	.0009
06.7	00.0	0.392	.0769	-.0246	-0.001	-.0016	.0009	.0007	.0009	.0012
03.4	-04.0	0.182	.0414	-.0043	0.038	-.0160	.0086	.0008	.0006	.0011
03.4	-02.0	0.183	.0423	-.0038	0.017	-.0081	.0050	.0006	.0006	.0010
03.4	00.0	0.181	.0423	-.0030	-0.002	-.0010	.0013	.0008	.0007	.0007
03.3	01.9	0.175	.0423	-.0021	-0.022	.0055	-.0022	.0006	.0007	.0007
03.3	04.0	0.176	.0426	-.0025	-0.045	.0142	-.0063	.0007	.0008	.0007
03.3	05.9	0.174	.0418	-.0021	-0.068	.0237	-.0103	.0011	.0009	.0007

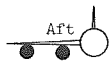
TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Continued

(f) Mass-flow configuration N_{1F}; $m_I/m_\infty = 0$, $m_O/m_\infty = 0$ - Continued



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.3	00.0	-0.223	.0482	.0429	-0.001	-.0020	-.0011	.0053	.0009	.0008
-02.1	00.0	-0.110	.0368	.0310	-0.002	-.0015	-.0021	.0051	.0009	.0008
00.0	00.0	0.001	.0329	.0152	-0.003	-.0008	-.0021	.0049	.0010	.0009
02.3	00.0	0.121	.0377	-.0006	-0.005	.0001	-.0019	.0048	.0010	.0010
04.5	00.0	0.243	.0513	-.0149	-0.004	-.0002	-.0010	.0052	.0011	.0011
09.0	00.0	0.481	.1074	-.0365	0.000	-.0015	-.0007	.0057	.0011	.0013
03.4	-04.0	0.178	.0423	-.0045	0.039	-.0173	.0068	.0058	.0010	.0010
03.4	-02.0	0.181	.0428	-.0062	0.016	-.0082	.0026	.0056	.0010	.0010
03.4	00.0	0.181	.0425	-.0075	-0.004	-.0003	-.0014	.0054	.0010	.0011
03.4	01.9	0.181	.0425	-.0093	-0.026	.0082	-.0052	.0054	.0011	.0011
03.4	02.9	0.180	.0421	-.0097	-0.037	.0129	-.0069	.0057	.0012	.0011
					M = 1.60					
-04.1	00.0	-0.164	.0431	.0280	0.000	-.0020	.0019	.0043	.0007	.0009
-02.0	00.0	-0.071	.0353	.0167	0.001	-.0020	.0010	.0042	.0007	.0009
00.1	00.0	0.018	.0336	.0050	0.000	-.0018	-.0000	.0042	.0007	.0009
02.2	00.0	0.108	.0374	-.0067	-0.001	-.0006	-.0007	.0042	.0008	.0008
04.3	00.0	0.210	.0488	-.0193	-0.002	.0006	-.0017	.0042	.0008	.0008
03.3	-05.9	0.163	.0419	-.0131	0.062	-.0255	.0062	.0049	.0007	.0011
03.3	-03.9	0.161	.0423	-.0135	0.040	-.0164	.0034	.0046	.0007	.0010
03.3	-01.9	0.161	.0424	-.0135	0.019	-.0077	.0011	.0043	.0007	.0009
03.3	00.0	0.161	.0423	-.0135	-0.001	.0000	-.0013	.0042	.0008	.0008
03.3	02.0	0.161	.0422	-.0134	-0.023	.0088	-.0036	.0044	.0008	.0008
03.3	04.0	0.160	.0423	-.0139	-0.045	.0177	-.0061	.0047	.0009	.0008
03.3	05.9	0.161	.0424	-.0135	-0.068	.0263	-.0085	.0051	.0010	.0008
03.4	07.9	0.163	.0426	-.0138	-0.092	.0341	-.0107	.0054	.0010	.0009
					M = 2.00					
-04.0	00.0	-0.133	.0401	.0209	0.000	-.0001	.0021	.0040	.0006	.0007
-01.8	00.0	-0.056	.0344	.0117	0.001	-.0005	.0020	.0038	.0006	.0007
00.2	00.0	0.020	.0337	.0020	0.001	-.0003	.0010	.0037	.0006	.0007
02.3	00.0	0.098	.0383	-.0068	0.000	.0001	.0003	.0037	.0006	.0007
04.4	00.0	0.180	.0489	-.0156	0.000	.0004	-.0005	.0039	.0006	.0007
03.4	-06.0	0.140	.0424	-.0117	0.054	-.0153	.0056	.0038	.0007	.0008
03.4	-03.9	0.144	.0427	-.0118	0.035	-.0096	.0037	.0037	.0007	.0008
03.4	-01.9	0.142	.0426	-.0114	0.017	-.0042	.0016	.0038	.0006	.0007
03.4	00.0	0.142	.0430	-.0116	0.000	.0004	-.0001	.0038	.0006	.0007
03.4	02.0	0.143	.0436	-.0115	-0.016	.0048	-.0019	.0039	.0007	.0007
03.4	04.0	0.140	.0438	-.0113	-0.034	.0091	-.0035	.0040	.0007	.0007
03.4	06.0	0.142	.0444	-.0120	-0.051	.0132	-.0054	.0042	.0007	.0007
03.4	08.0	0.141	.0443	-.0125	-0.073	.0179	-.0068	.0044	.0007	.0007

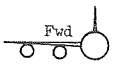
TABLE III.- AERODYNAMIC CHARACTERISTICS OF MODEL 1 ($F_1W_1C_1V_1N_1$) - Concluded

(f) Mass-flow configuration N_{1F}; $m_I/m_\infty = 0$, $m_O/m_\infty = 0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 2.50					
-04.3	00.0	-0.117	.0391	.0151	0.003	-.0033	.0029	.0038	.0006	.0007
00.0	00.0	0.014	.0322	.0011	0.004	-.0046	.0022	.0038	.0006	.0006
01.9	00.0	0.081	.0359	-.0055	0.005	-.0046	.0015	.0038	.0006	.0006
04.0	00.0	0.146	.0448	-.0114	0.005	-.0043	.0007	.0040	.0006	.0006
06.1	00.0	0.210	.0584	-.0170	0.006	-.0039	-.0002	.0040	.0006	.0006
03.0	-06.0	0.114	.0403	-.0089	0.048	-.0114	.0050	.0038	.0006	.0006
03.0	-04.0	0.114	.0402	-.0091	0.032	-.0090	.0037	.0038	.0006	.0006
03.0	-02.0	0.114	.0400	-.0087	0.018	-.0067	.0025	.0038	.0006	.0006
03.0	00.0	0.114	.0399	-.0087	0.005	-.0044	.0011	.0038	.0006	.0006
03.0	01.9	0.113	.0399	-.0089	-0.008	-.0020	-.0004	.0038	.0006	.0006
03.0	04.0	0.111	.0400	-.0090	-0.024	.0012	-.0020	.0038	.0006	.0006
03.0	06.0	0.108	.0401	-.0089	-0.042	.0048	-.0035	.0038	.0006	.0007
03.0	08.0	0.106	.0406	-.0089	-0.062	.0083	-.0048	.0038	.0006	.0007
					M = 3.00					
-04.2	00.1	-0.093	.0373	.0094	0.002	-.0033	.0028	.0030	.0005	.0004
-00.1	00.1	0.020	.0317	-.0010	0.004	-.0049	.0025	.0030	.0005	.0005
01.9	00.1	0.075	.0353	-.0054	0.004	-.0052	.0021	.0030	.0005	.0005
04.0	00.1	0.130	.0442	-.0093	0.005	-.0055	.0016	.0030	.0005	.0004
08.1	00.1	0.239	.0717	-.0173	0.007	-.0057	.0001	.0031	.0004	.0005
02.8	-06.0	0.102	.0398	-.0074	0.048	-.0100	.0056	.0031	.0004	.0004
02.9	-04.0	0.103	.0396	-.0074	0.033	-.0088	.0045	.0031	.0005	.0004
02.9	-01.9	0.102	.0394	-.0069	0.019	-.0074	.0032	.0031	.0005	.0004
03.0	00.1	0.103	.0392	-.0071	0.005	-.0054	.0017	.0031	.0005	.0004
03.0	02.1	0.102	.0395	-.0071	-0.009	-.0028	.0002	.0031	.0004	.0005
03.1	04.2	0.100	.0396	-.0071	-0.024	-.0003	-.0011	.0031	.0004	.0005
03.1	06.3	0.097	.0398	-.0068	-0.040	.0017	-.0023	.0031	.0004	.0005
03.2	08.3	0.096	.0404	-.0071	-0.061	.0040	-.0036	.0031	.0004	.0005
					M = 3.50					
-04.2	00.0	-0.077	.0345	.0057	0.002	-.0033	.0028	.0023	.0004	.0003
-00.1	00.0	0.021	.0306	-.0011	0.004	-.0043	.0022	.0024	.0004	.0003
01.9	00.0	0.069	.0339	-.0040	0.005	-.0046	.0017	.0023	.0003	.0003
04.0	00.0	0.115	.0417	-.0065	0.005	-.0047	.0010	.0023	.0003	.0004
08.1	00.0	0.210	.0675	-.0118	0.008	-.0055	-.0003	.0023	.0003	.0004
02.5	-06.3	0.093	.0385	-.0052	0.051	-.0105	.0058	.0024	.0003	.0003
02.6	-04.2	0.092	.0373	-.0055	0.034	-.0090	.0043	.0024	.0003	.0003
02.8	-02.1	0.091	.0374	-.0053	0.018	-.0070	.0027	.0024	.0003	.0003
02.9	00.0	0.092	.0371	-.0051	0.005	-.0047	.0012	.0024	.0003	.0004
03.1	02.1	0.089	.0371	-.0047	-0.008	-.0028	-.0001	.0024	.0003	.0004
03.2	04.3	0.087	.0374	-.0047	-0.024	-.0010	-.0014	.0024	.0003	.0004
03.3	06.4	0.086	.0377	-.0046	-0.039	-.0002	-.0023	.0024	.0003	.0004
03.5	08.5	0.084	.0388	-.0044	-0.056	.0004	-.0034	.0024	.0003	.0004

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$)

(a) Mass-flow configuration N_{2A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 0.65										
-04.3	00.0	-0.219	.0287	.0018	0.000	-.0003	.0004	.0017	.0000	.0000
-02.1	00.0	-0.116	.0179	.0043	0.001	-.0002	.0004	.0019	.0000	.0000
00.0	00.0	-0.015	.0144	.0050	0.001	.0001	.0004	.0019	.0000	.0000
02.1	00.0	0.092	.0172	.0071	0.000	.0003	.0003	.0019	.0000	.0000
04.3	00.0	0.201	.0284	.0106	0.000	.0002	.0004	.0020	.0000	.0000
08.7	00.0	0.423	.0754	.0231	0.001	.0005	.0002	.0025	.0000	.0000
03.2	-04.0	0.143	.0209	.0085	0.038	-.0121	.0064	.0019	.0000	.0000
03.2	-02.0	0.146	.0212	.0088	0.018	-.0055	.0034	.0018	.0000	.0000
03.2	00.0	0.144	.0213	.0087	0.000	.0001	.0004	.0018	.0000	.0000
03.2	01.9	0.141	.0212	.0084	-0.018	.0053	-.0024	.0019	.0000	.0000
03.2	03.9	0.139	.0208	.0079	-0.038	.0121	-.0054	.0020	.0000	.0000
03.2	05.9	0.136	.0204	.0077	-0.061	.0199	-.0085	.0021	.0000	.0000
M = 0.85										
-04.4	00.0	-0.239	.0304	.0067	0.000	-.0003	.0004	.0019	.0000	.0000
-02.2	00.0	-0.125	.0184	.0070	0.000	-.0002	.0004	.0018	.0000	.0000
00.0	00.0	-0.015	.0146	.0057	0.001	.0001	.0005	.0018	.0000	.0000
02.2	00.0	0.103	.0180	.0056	0.000	.0004	.0004	.0018	.0000	.0000
04.4	00.0	0.223	.0303	.0071	0.001	.0002	.0006	.0020	.0000	.0000
08.9	00.0	0.467	.0844	.0162	0.001	.0005	.0003	.0022	.0000	.0000
03.3	-04.0	0.161	.0220	.0064	0.040	-.0129	.0072	.0022	.0000	.0000
03.3	-02.0	0.163	.0221	.0063	0.019	-.0058	.0038	.0023	.0000	.0000
03.3	00.0	0.161	.0224	.0063	0.001	.0001	.0005	.0022	.0000	.0000
03.3	02.0	0.157	.0222	.0061	-0.017	.0058	-.0027	.0020	.0000	.0000
03.3	03.9	0.154	.0217	.0057	-0.039	.0129	-.0061	.0021	.0000	.0000
03.3	05.9	0.153	.0214	.0057	-0.063	.0210	-.0095	.0025	.0000	.0000
M = 0.95										
-04.5	00.0	-0.264	.0335	.0144	0.001	-.0004	.0007	.0019	.0000	.0000
-02.2	00.0	-0.130	.0197	.0088	0.001	-.0003	.0004	.0017	.0000	.0000
00.0	00.0	-0.014	.0155	.0051	0.001	.0001	.0005	.0017	.0000	.0000
02.2	00.0	0.121	.0196	-.0020	0.000	.0004	.0005	.0018	.0000	.0000
04.5	00.0	0.250	.0333	-.0030	0.001	.0002	.0005	.0022	.0000	.0000
09.0	00.0	0.521	.0961	-.0061	0.001	.0004	.0006	.0022	.0000	.0000
M = 1.00										
-04.5	00.0	-0.273	.0398	.0278	0.000	-.0002	.0005	.0010	.0000	.0000
-02.2	00.0	-0.139	.0254	.0156	0.000	-.0002	.0004	.0010	.0000	.0000
00.0	00.0	-0.012	.0206	.0040	0.001	.0001	.0004	.0012	.0000	.0000
02.2	00.0	0.122	.0246	-.0055	-0.000	.0004	.0004	.0013	.0000	.0000
04.5	00.0	0.261	.0390	-.0148	0.001	.0002	.0007	.0014	.0000	.0000
09.0	00.0	0.540	.1028	-.0319	0.001	.0004	.0004	.0015	.0000	.0000
03.4	-04.0	0.191	.0297	-.0095	0.042	-.0141	.0077	.0016	.0000	.0000
03.4	-02.0	0.194	.0299	-.0102	0.020	-.0063	.0039	.0016	.0000	.0000
03.4	00.0	0.193	.0301	-.0104	0.000	.0001	.0005	.0016	.0000	.0000
03.3	02.0	0.187	.0301	-.0102	-0.019	.0063	-.0028	.0015	.0000	.0000
03.4	03.9	0.187	.0298	-.0098	-0.042	.0140	-.0065	.0017	.0000	.0000
03.4	06.0	0.186	.0294	-.0096	-0.066	.0230	-.0103	.0019	.0000	.0000

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(a) Mass-flow configuration N_{2A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Continued 

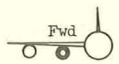
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.25										
-04.4	00.0	-0.246	.0372	.0336	0.001	-.0004	.0004	.0056	.0000	.0000
-02.2	00.0	-0.126	.0238	.0220	0.000	-.0002	.0005	.0054	.0000	.0000
00.0	00.0	-0.010	.0195	.0076	0.001	.0001	.0005	.0054	.0000	.0000
02.2	00.0	0.114	.0237	-.0062	-0.001	.0004	.0002	.0054	.0000	.0000
04.5	00.0	0.240	.0375	-.0183	0.000	.0002	.0004	.0054	.0000	.0000
09.0	00.0	0.488	.0948	-.0385	0.000	.0004	.0002	.0060	.0000	.0000
03.4	-04.0	0.178	.0288	-.0124	0.043	-.0148	.0073	.0060	.0000	.0000
03.4	-02.0	0.181	.0293	-.0125	0.021	-.0068	.0037	.0059	.0000	.0000
03.4	00.0	0.177	.0289	-.0122	-0.000	.0002	.0003	.0057	.0000	.0000
03.4	01.9	0.173	.0290	-.0122	-0.021	.0068	-.0029	.0057	.0000	.0000
03.4	03.9	0.173	.0287	-.0126	-0.044	.0148	-.0063	.0058	.0000	.0000
03.4	05.9	0.174	.0288	-.0130	-0.069	.0240	-.0098	.0060	.0000	.0000
M = 1.40										
-04.4	00.0	-0.222	.0345	.0289	-0.002	.0005	.0000	.0054	.0000	.0000
-02.1	00.0	-0.110	.0230	.0190	-0.001	.0006	.0001	.0052	.0000	.0000
00.0	00.0	-0.002	.0192	.0063	0.000	.0008	.0003	.0051	.0000	.0000
02.2	00.0	0.111	.0233	-.0055	-0.001	.0010	.0001	.0051	.0000	.0000
04.5	00.0	0.226	.0361	-.0162	0.000	.0006	.0002	.0051	.0000	.0000
09.0	00.0	0.450	.0881	-.0349	0.000	.0009	.0002	.0055	.0000	.0000
03.4	-04.0	0.168	.0279	-.0117	0.044	-.0149	.0070	.0054	.0000	.0000
03.4	-02.0	0.169	.0281	-.0114	0.021	-.0067	.0036	.0054	.0000	.0000
03.4	00.0	0.167	.0280	-.0111	-0.001	.0006	.0003	.0053	.0000	.0000
03.3	01.9	0.164	.0280	-.0109	-0.022	.0077	-.0029	.0053	.0000	.0000
03.3	03.9	0.162	.0276	-.0114	-0.046	.0159	-.0062	.0053	.0000	.0000
03.3	06.0	0.162	.0276	-.0116	-0.071	.0246	-.0096	.0055	.0000	.0000
M = 1.60										
-04.2	00.0	-0.191	.0314	.0253	0.000	-.0002	-.0001	.0045	.0000	.0000
-02.1	00.0	-0.096	.0214	.0152	0.000	-.0001	-.0001	.0044	.0000	.0000
00.0	00.0	-0.003	.0178	.0041	0.000	-.0001	-.0001	.0044	.0000	.0000
02.1	00.0	0.095	.0217	-.0062	0.000	.0001	.0000	.0044	.0000	.0000
04.3	00.0	0.197	.0323	-.0170	0.000	.0000	.0000	.0044	.0000	.0000
08.6	00.0	0.398	.0764	-.0340	0.001	.0000	-.0003	.0044	.0000	.0000
03.2	-06.0	0.140	.0254	-.0108	0.066	-.0222	.0079	.0050	.0000	.0000
03.2	-04.0	0.143	.0257	-.0110	0.043	-.0150	.0057	.0049	.0000	.0000
03.2	-02.0	0.142	.0257	-.0111	0.021	-.0073	.0026	.0046	.0000	.0000
03.2	00.0	0.146	.0260	-.0116	0.000	-.0001	-.0001	.0044	.0000	.0000
03.2	02.0	0.154	.0264	-.0125	-0.021	.0067	-.0028	.0044	.0000	.0000
03.2	04.0	0.156	.0266	-.0127	-0.045	.0141	-.0056	.0046	.0000	.0000
03.3	06.0	0.154	.0262	-.0129	-0.067	.0211	-.0080	.0050	.0000	.0000
03.3	08.0	0.156	.0264	-.0125	-0.092	.0281	-.0103	.0051	.0000	.0000
M = 2.00										
-04.2	00.0	-0.161	.0288	.0200	-0.004	.0002	.0001	.0036	.0000	.0000
-02.1	-00.1	-0.080	.0201	.0124	-0.004	.0001	.0001	.0036	.0000	.0000
00.0	-00.1	0.001	.0168	.0032	-0.003	.0000	.0001	.0036	.0000	.0000
02.1	-00.1	0.086	.0204	-.0058	-0.002	.0000	.0000	.0036	.0000	.0000
04.2	-00.1	0.172	.0299	-.0136	-0.002	.0001	.0000	.0035	.0000	.0000
08.5	-00.1	0.341	.0679	-.0275	-0.002	.0002	-.0001	.0036	.0000	.0000
03.2	-06.1	0.124	.0247	-.0091	0.054	-.0141	.0058	.0040	.0000	.0000
03.1	-04.1	0.125	.0245	-.0093	0.033	-.0095	.0040	.0039	.0000	.0000
03.1	-02.1	0.125	.0242	-.0095	0.015	-.0049	.0020	.0036	.0000	.0000
03.1	-00.1	0.129	.0244	-.0101	-0.002	-.0002	.0001	.0035	.0000	.0000
03.2	01.8	0.132	.0247	-.0102	-0.020	.0045	-.0018	.0035	.0000	.0000
03.2	03.9	0.132	.0248	-.0097	-0.039	.0091	-.0038	.0037	.0000	.0000
03.2	05.9	0.132	.0247	-.0096	-0.058	.0135	-.0055	.0040	.0000	.0000
03.2	07.9	0.132	.0248	-.0100	-0.080	.0181	-.0071	.0042	.0000	.0000

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(a) Mass-flow configuration N_{2A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Concluded

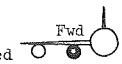
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
				M = 2.50						
-04.3	00.0	-0.136	.0265	.0141	-0.001	.0001	.0002	.0036	.0000	.0000
-02.2	00.0	-0.070	.0189	.0090	-0.001	.0001	.0001	.0035	.0000	.0000
-00.1	00.0	-0.003	.0158	.0025	0.000	.0001	.0001	.0035	.0000	.0000
01.9	00.0	0.067	.0183	-.0035	0.000	.0000	.0002	.0035	.0000	.0000
04.0	00.0	0.136	.0257	-.0088	0.000	.0000	.0002	.0036	.0000	.0000
08.2	00.0	0.273	.0562	-.0183	0.000	-.0001	.0001	.0038	.0000	.0000
02.9	-06.0	0.101	.0216	-.0066	0.051	-.0074	.0044	.0036	.0000	.0000
02.9	-04.0	0.101	.0216	-.0067	0.033	-.0050	.0030	.0037	.0000	.0000
02.9	-02.0	0.100	.0215	-.0064	0.016	-.0024	.0015	.0036	.0000	.0000
02.9	00.0	0.102	.0212	-.0064	0.000	.0000	.0002	.0036	.0000	.0000
02.9	02.0	0.102	.0216	-.0065	-0.017	.0026	-.0013	.0035	.0000	.0000
02.9	04.0	0.103	.0218	-.0068	-0.033	.0052	-.0026	.0036	.0000	.0000
02.9	06.0	0.102	.0219	-.0071	-0.051	.0074	-.0039	.0036	.0000	.0000
02.9	08.0	0.101	.0222	-.0076	-0.071	.0097	-.0050	.0037	.0000	.0000
				M = 3.00						
-04.3	00.1	-0.114	.0236	.0098	0.000	-.0000	.0001	.0029	.0000	.0000
-02.2	00.1	-0.058	.0168	.0064	-0.001	-.0000	.0001	.0029	.0000	.0000
-00.1	00.1	0.001	.0140	.0022	0.000	-.0001	.0001	.0029	.0000	.0000
01.9	00.1	0.059	.0165	-.0016	0.000	-.0001	.0001	.0029	.0000	.0000
04.0	00.1	0.117	.0233	-.0048	0.000	-.0001	.0001	.0028	.0000	.0000
08.1	00.1	0.235	.0495	-.0118	0.000	-.0001	.0001	.0030	.0000	.0000
02.8	-06.0	0.088	.0197	-.0047	0.048	-.0037	.0039	.0030	.0000	.0000
02.8	-04.0	0.088	.0196	-.0038	0.031	-.0029	.0027	.0030	.0000	.0000
02.9	-01.9	0.087	.0193	-.0032	0.015	-.0015	.0014	.0029	.0000	.0000
02.9	00.1	0.088	.0194	-.0032	0.000	-.0001	.0001	.0029	.0000	.0000
03.0	02.1	0.088	.0196	-.0033	-0.015	.0013	-.0012	.0028	.0000	.0000
03.0	04.2	0.088	.0200	-.0039	-0.031	.0029	-.0025	.0029	.0000	.0000
03.1	06.3	0.089	.0203	-.0048	-0.048	.0038	-.0037	.0030	.0000	.0000
03.1	08.3	0.089	.0208	-.0053	-0.069	.0049	-.0047	.0031	.0000	.0000
04.9	-06.0	0.148	.0281	-.0090	0.049	-.0018	.0040	.0032	.0000	.0000
05.0	-01.9	0.145	.0278	-.0066	0.016	-.0008	.0014	.0031	.0000	.0000
05.0	00.1	0.147	.0282	-.0065	0.000	-.0001	.0001	.0030	.0000	.0000
05.1	02.1	0.147	.0285	-.0066	-0.015	.0007	-.0012	.0030	.0000	.0000
05.2	06.3	0.148	.0291	-.0088	-0.049	.0018	-.0038	.0031	.0000	.0000
05.2	08.4	0.149	.0297	-.0095	-0.070	.0029	-.0051	.0032	.0000	.0000
				M = 3.50						
-04.2	00.0	-0.097	.0209	.0061	-0.002	.0003	.0001	.0025	.0000	.0000
-02.2	00.0	-0.048	.0149	.0041	-0.002	.0003	.0001	.0024	.0000	.0000
-00.1	00.0	0.001	.0127	.0013	-0.002	.0002	.0001	.0024	.0000	.0000
01.9	00.0	0.051	.0147	-.0010	-0.001	.0002	.0001	.0023	.0000	.0000
03.9	00.0	0.101	.0207	-.0028	-0.001	.0001	.0001	.0023	.0000	.0000
08.0	00.0	0.203	.0434	-.0065	-0.001	.0002	.0000	.0023	.0000	.0000
02.5	-06.4	0.078	.0172	-.0037	0.047	-.0023	.0035	.0024	.0000	.0000
02.6	-04.2	0.076	.0172	-.0027	0.031	-.0024	.0024	.0024	.0000	.0000
02.7	-02.1	0.075	.0170	-.0019	0.015	-.0016	.0013	.0024	.0000	.0000
02.9	00.0	0.077	.0171	-.0019	-0.000	.0002	.0001	.0023	.0000	.0000
03.0	02.1	0.077	.0175	-.0021	-0.017	.0019	-.0011	.0023	.0000	.0000
03.2	04.3	0.077	.0179	-.0026	-0.032	.0027	-.0022	.0023	.0000	.0000
03.3	06.4	0.078	.0184	-.0036	-0.048	.0025	-.0032	.0023	.0000	.0000
03.4	08.5	0.079	.0191	-.0040	-0.067	.0024	-.0043	.0024	.0000	.0000

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(b) Mass-flow configuration N_{2B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ 

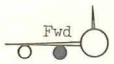
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.60										
-04.2	00.0	-0.194	.0363	.0261	0.001	-.0011	.0004	.0045	.0011	.0000
-02.1	00.0	-0.099	.0263	.0161	0.001	-.0010	.0004	.0044	.0010	.0000
00.0	00.0	-0.005	.0227	.0049	0.001	-.0008	.0006	.0043	.0008	.0000
02.1	00.0	0.089	.0260	-.0058	0.001	-.0004	.0005	.0043	.0006	.0000
04.3	00.0	0.189	.0362	-.0165	0.002	-.0003	.0005	.0044	.0004	.0000
08.5	00.0	0.388	.0791	-.0339	0.002	-.0002	.0001	.0045	.0001	.0000
03.3	-06.1	0.143	.0305	-.0115	0.067	-.0226	.0075	.0048	.0006	.0000
03.3	-04.0	0.143	.0306	-.0109	0.044	-.0153	.0053	.0048	.0005	.0000
03.3	-02.1	0.142	.0308	-.0105	0.022	-.0078	.0025	.0045	.0005	.0000
03.3	-00.1	0.141	.0306	-.0101	0.002	-.0008	-.0003	.0043	.0004	.0000
03.3	01.9	0.146	.0309	-.0111	-0.019	.0060	-.0034	.0045	.0004	.0000
03.3	03.8	0.145	.0307	-.0119	-0.041	.0133	-.0062	.0047	.0005	.0000
03.3	05.8	0.146	.0305	-.0122	-0.063	.0205	-.0087	.0050	.0006	.0000
03.4	07.8	0.146	.0304	-.0129	-0.087	.0273	-.0108	.0052	.0007	.0000
M = 2.00										
-04.2	00.0	-0.160	.0336	.0215	-0.002	.0005	-.0002	.0037	.0006	.0000
-02.0	-00.1	-0.081	.0250	.0132	-0.002	.0007	-.0003	.0036	.0006	.0000
00.0	-00.1	-0.001	.0218	.0038	-0.002	.0009	-.0004	.0035	.0006	.0000
02.1	-00.1	0.082	.0251	-.0049	-0.001	.0012	-.0006	.0035	.0006	.0000
04.2	-00.1	0.166	.0342	-.0129	-0.001	.0013	-.0008	.0035	.0005	.0000
08.5	-00.1	0.331	.0709	-.0268	0.000	.0015	-.0009	.0037	.0002	.0000
03.4	-06.1	0.125	.0301	-.0061	0.060	-.0154	.0048	.0039	.0006	.0000
03.4	-04.1	0.128	.0301	-.0065	0.040	-.0107	.0030	.0038	.0005	.0000
03.4	-02.0	0.127	.0300	-.0068	0.020	-.0058	.0011	.0036	.0005	.0000
03.4	00.0	0.126	.0298	-.0071	0.002	-.0010	-.0008	.0035	.0005	.0000
03.4	01.8	0.131	.0301	-.0076	-0.016	.0039	-.0028	.0036	.0005	.0000
03.4	03.9	0.127	.0296	-.0079	-0.036	.0087	-.0047	.0037	.0005	.0000
03.4	05.9	0.129	.0299	-.0079	-0.056	.0132	-.0064	.0039	.0005	.0000
03.5	07.9	0.129	.0300	-.0086	-0.078	.0178	-.0078	.0041	.0005	.0000
M = 2.50										
-04.3	00.0	-0.134	.0312	.0153	0.000	-.0010	.0000	.0035	.0005	.0000
-02.2	00.0	-0.069	.0236	.0098	0.000	-.0007	-.0003	.0035	.0005	.0000
-00.1	00.0	-0.004	.0206	.0032	0.000	-.0005	-.0004	.0035	.0005	.0000
01.9	00.0	0.064	.0230	-.0028	0.001	-.0003	-.0006	.0035	.0004	.0000
04.0	00.0	0.132	.0304	-.0081	0.002	.0000	-.0008	.0035	.0004	.0000
08.2	00.0	0.267	.0598	-.0177	0.002	.0003	-.0010	.0037	.0004	.0000
02.9	-06.0	0.098	.0267	-.0055	0.052	-.0084	.0034	.0035	.0004	.0000
02.9	-04.0	0.098	.0264	-.0059	0.033	-.0057	.0020	.0035	.0004	.0000
02.9	-02.0	0.097	.0261	-.0057	0.017	-.0028	.0006	.0035	.0004	.0000
02.9	00.0	0.099	.0261	-.0055	0.001	-.0002	-.0007	.0035	.0004	.0000
02.9	01.9	0.098	.0260	-.0059	-0.015	.0027	-.0020	.0035	.0004	.0000
02.9	04.0	0.098	.0261	-.0061	-0.032	.0056	-.0034	.0036	.0004	.0000
02.9	06.0	0.097	.0261	-.0066	-0.049	.0079	-.0047	.0037	.0004	.0000
02.9	08.0	0.097	.0262	-.0073	-0.068	.0102	-.0057	.0037	.0004	.0000

TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(b) Mass-flow configuration N_{2B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 3.00										
-04.3	00.1	-0.112	.0284	.0108	0.001	-.0007	.0002	.0030	.0003	.0000
-02.2	00.1	-0.056	.0217	.0069	0.001	-.0005	.0000	.0030	.0003	.0000
-00.1	00.1	0.000	.0191	.0026	0.001	-.0002	-.0002	.0029	.0003	.0000
01.9	00.1	0.057	.0213	-.0012	0.001	-.0000	-.0005	.0029	.0003	.0000
03.9	00.1	0.114	.0279	-.0045	0.001	.0002	-.0008	.0029	.0003	.0000
08.1	00.1	0.229	.0531	-.0120	0.002	.0004	-.0010	.0030	.0002	.0000
02.8	-06.0	0.086	.0249	-.0035	0.048	-.0044	.0030	.0030	.0003	.0000
02.8	-04.0	0.086	.0246	-.0033	0.031	-.0031	.0018	.0030	.0003	.0000
02.9	-01.9	0.084	.0242	-.0027	0.015	-.0014	.0006	.0030	.0002	.0000
02.9	00.1	0.086	.0241	-.0028	0.001	.0001	-.0007	.0030	.0002	.0000
03.0	02.1	0.086	.0241	-.0031	-0.014	.0017	-.0020	.0030	.0002	.0000
03.0	04.2	0.085	.0244	-.0038	-0.029	.0032	-.0032	.0030	.0003	.0000
03.0	06.2	0.086	.0246	-.0048	-0.045	.0043	-.0044	.0031	.0003	.0000
03.1	08.3	0.086	.0249	-.0055	-0.064	.0053	-.0054	.0031	.0003	.0000
04.8	-06.0	0.143	.0329	-.0072	0.050	-.0029	.0028	.0031	.0002	.0000
04.9	-04.0	0.141	.0325	-.0071	0.031	-.0017	.0016	.0030	.0002	.0000
04.9	-01.9	0.141	.0324	-.0063	0.016	-.0006	.0004	.0030	.0002	.0000
05.0	00.1	0.142	.0325	-.0062	0.001	.0002	-.0009	.0030	.0002	.0000
05.0	02.1	0.142	.0327	-.0064	-0.013	.0012	-.0022	.0030	.0002	.0000
05.1	04.2	0.143	.0328	-.0075	-0.030	.0020	-.0035	.0030	.0002	.0000
05.1	06.2	0.144	.0331	-.0088	-0.045	.0023	-.0047	.0031	.0002	.0000
05.2	08.4	0.143	.0332	-.0094	-0.066	.0031	-.0060	.0032	.0003	.0000
M = 3.50										
-04.2	00.0	-0.094	.0258	.0068	0.000	-.0005	.0005	.0024	.0002	.0000
-02.2	00.0	-0.047	.0199	.0044	-0.002	-.0004	.0002	.0024	.0002	.0000
-00.1	00.0	0.002	.0177	.0017	0.000	.0000	-.0001	.0024	.0002	.0000
01.8	00.0	0.050	.0196	-.0005	0.000	.0000	-.0004	.0023	.0001	.0000
03.9	00.0	0.097	.0250	-.0026	0.000	.0003	-.0007	.0023	.0001	.0000
08.0	00.0	0.195	.0471	-.0066	0.001	.0005	-.0011	.0024	.0001	.0000
02.5	-06.4	0.075	.0228	-.0017	0.048	-.0030	.0028	.0025	.0001	.0000
02.6	-04.2	0.075	.0224	-.0020	0.031	-.0024	.0018	.0025	.0001	.0000
02.7	-02.1	0.074	.0221	-.0016	0.016	-.0014	.0007	.0025	.0001	.0000
02.9	00.0	0.075	.0220	-.0015	0.002	.0002	-.0006	.0024	.0001	.0000
03.0	02.1	0.074	.0220	-.0018	-0.014	.0018	-.0018	.0024	.0001	.0000
03.2	04.2	0.074	.0223	-.0026	-0.029	.0026	-.0030	.0024	.0001	.0000
03.3	06.4	0.074	.0225	-.0035	-0.043	.0023	-.0040	.0024	.0001	.0000
03.4	08.6	0.075	.0229	-.0036	-0.062	.0021	-.0052	.0025	.0002	.0000
04.5	-06.4	0.123	.0295	-.0041	0.049	-.0016	.0027	.0024	.0001	.0000
04.7	-04.2	0.122	.0292	-.0043	0.031	-.0009	.0016	.0024	.0001	.0000
04.8	-02.1	0.122	.0290	-.0037	0.016	-.0006	.0004	.0024	.0001	.0000
04.9	00.0	0.123	.0292	-.0032	0.001	.0004	-.0009	.0024	.0001	.0000
05.1	02.1	0.122	.0291	-.0038	-0.014	.0015	-.0022	.0024	.0001	.0000
05.2	04.3	0.123	.0293	-.0052	-0.029	.0015	-.0034	.0024	.0001	.0000
05.3	06.4	0.123	.0296	-.0060	-0.044	.0005	-.0045	.0024	.0001	.0000
05.5	08.6	0.123	.0301	-.0059	-0.062	.0002	-.0057	.0025	.0002	.0000

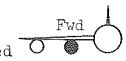
TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(c) Mass-flow configuration N_{2C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 0.65										
-04.3	00.0	-0.219	.0325	.0009	-0.001	-.0012	.0002	.0019	.0012	.0000
-02.1	00.0	-0.116	.0215	.0025	0.000	-.0008	.0003	.0018	.0011	.0000
00.0	00.0	-0.017	.0183	.0027	0.000	-.0004	.0003	.0017	.0008	.0000
02.1	00.0	0.085	.0212	.0050	0.000	-.0001	-.0001	.0017	.0005	.0000
04.3	00.0	0.194	.0320	.0089	0.001	-.0003	-.0002	.0018	.0003	.0000
08.7	00.0	0.419	.0790	.0210	0.002	-.0001	.0002	.0023	.0002	.0000
03.2	-04.0	0.139	.0246	.0060	0.038	-.0127	.0059	.0019	.0005	.0000
03.2	-02.0	0.141	.0250	.0066	0.018	-.0060	.0028	.0019	.0004	.0000
03.2	00.0	0.140	.0256	.0070	0.000	-.0004	-.0002	.0016	.0003	.0000
03.2	01.9	0.137	.0253	.0069	-0.017	.0050	-.0030	.0017	.0004	.0000
03.2	03.9	0.134	.0248	.0063	-0.037	.0118	-.0059	.0019	.0004	.0000
03.2	05.9	0.132	.0244	.0062	-0.060	.0198	-.0088	.0022	.0005	.0000
M = 0.85										
-04.4	00.0	-0.242	.0349	.0048	-0.001	-.0011	.0003	.0020	.0013	.0000
-02.2	00.0	-0.125	.0225	.0041	0.000	-.0008	.0004	.0017	.0012	.0000
00.0	00.0	-0.016	.0186	.0023	0.000	-.0003	.0004	.0018	.0009	.0000
02.2	00.0	0.098	.0216	.0028	0.000	-.0002	-.0000	.0021	.0006	.0000
04.4	00.0	0.217	.0343	.0053	0.001	-.0004	-.0002	.0019	.0004	.0000
08.9	00.0	0.462	.0882	.0148	0.002	-.0002	.0003	.0023	.0001	.0000
03.3	-04.0	0.156	.0257	.0031	0.039	-.0133	.0065	.0022	.0006	.0000
03.3	-02.0	0.157	.0263	.0036	0.019	-.0064	.0032	.0019	.0005	.0000
03.3	00.0	0.155	.0263	.0042	0.001	-.0005	-.0001	.0021	.0005	.0000
03.3	01.9	0.153	.0266	.0040	-0.018	.0053	-.0033	.0018	.0004	.0000
03.3	03.9	0.150	.0260	.0038	-0.039	.0125	-.0065	.0021	.0005	.0000
03.3	05.9	0.148	.0258	.0039	-0.061	.0209	-.0098	.0022	.0005	.0000
M = 0.95										
-04.5	00.0	-0.265	.0376	.0117	-0.001	-.0012	.0006	.0020	.0020	.0000
-02.2	00.0	-0.131	.0232	.0044	0.000	-.0011	.0002	.0017	.0016	.0000
00.0	00.0	-0.015	.0188	.0008	0.000	-.0003	.0006	.0019	.0011	.0000
02.2	00.0	0.112	.0227	-.0020	0.000	-.0002	-.0001	.0019	.0008	.0000
04.5	00.0	0.241	.0369	-.0032	0.001	-.0006	-.0004	.0019	.0006	.0000
09.0	00.0	0.514	.0991	-.0046	0.002	-.0005	.0009	.0022	.0002	.0000
M = 1.00										
-04.5	00.0	-0.281	.0437	.0249	0.000	-.0011	-.0001	.0014	.0019	.0000
-02.2	00.0	-0.143	.0280	.0099	0.001	-.0012	-.0003	.0012	.0018	.0000
00.0	00.0	-0.016	.0228	-.0009	-0.000	-.0002	.0008	.0014	.0014	.0000
02.2	00.0	0.118	.0265	-.0088	0.000	-.0002	.0003	.0017	.0010	.0000
04.5	00.0	0.256	.0417	-.0157	0.001	-.0006	.0001	.0017	.0007	.0000
09.0	00.0	0.538	.1066	-.0316	0.002	-.0005	.0003	.0015	.0002	.0000
03.3	-04.0	0.186	.0321	-.0126	0.041	-.0146	.0072	.0019	.0008	.0000
03.3	-02.0	0.189	.0326	-.0126	0.020	-.0071	.0037	.0019	.0007	.0000
03.3	00.0	0.186	.0326	-.0123	0.000	-.0005	.0002	.0018	.0007	.0000
03.3	01.9	0.184	.0332	-.0131	-0.019	.0058	-.0030	.0015	.0006	.0000
03.3	03.9	0.184	.0328	-.0128	-0.042	.0138	-.0067	.0019	.0007	.0000
03.3	05.9	0.182	.0320	-.0118	-0.066	.0227	-.0104	.0023	.0007	.0000

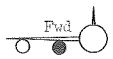
TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Continued

(c) Mass-flow configuration N_{2C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Continued



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.4	00.0	-0.256	.0433	.0362	0.000	-.0014	.0003	.0056	.0016	.0000
-02.2	00.0	-0.137	.0293	.0234	0.000	-.0013	.0002	.0054	.0015	.0000
00.0	00.0	-0.019	.0246	.0084	0.001	-.0007	-.0003	.0053	.0012	.0000
02.2	00.0	0.104	.0282	-.0065	-0.001	-.0001	-.0010	.0054	.0009	.0000
04.5	00.0	0.232	.0419	-.0192	-0.001	-.0001	-.0006	.0054	.0007	.0000
09.0	00.0	0.481	.0990	-.0409	0.000	.0004	-.0001	.0059	.0004	.0000
03.3	-04.0	0.168	.0331	-.0128	0.043	-.0152	.0062	.0059	.0007	.0000
03.3	-02.0	0.170	.0336	-.0127	0.020	-.0070	.0025	.0058	.0007	.0000
03.3	00.0	0.168	.0336	-.0127	-0.001	-.0002	-.0008	.0056	.0006	.0000
03.3	01.9	0.165	.0337	-.0130	-0.021	.0065	-.0039	.0056	.0006	.0000
03.3	03.9	0.165	.0338	-.0134	-0.044	.0144	-.0071	.0057	.0007	.0000
03.3	05.9	0.164	.0337	-.0134	-0.068	.0232	-.0102	.0059	.0007	.0000
					M = 1.40					
-04.4	00.0	-0.228	.0413	.0316	-0.001	-.0004	-.0008	.0051	.0013	.0000
-02.1	00.0	-0.120	.0292	.0214	-0.001	-.0004	-.0008	.0051	.0012	.0000
00.0	00.0	-0.011	.0251	.0077	0.000	-.0002	-.0005	.0051	.0008	.0000
02.2	00.0	0.099	.0284	-.0045	-0.001	.0000	-.0006	.0051	.0006	.0000
04.5	00.0	0.214	.0405	-.0154	0.000	.0000	-.0004	.0051	.0004	.0000
08.9	00.0	0.437	.0915	-.0353	0.000	.0009	-.0001	.0055	.0002	.0000
03.3	-04.0	0.157	.0325	-.0122	0.043	-.0155	.0059	.0055	.0004	.0000
03.3	-02.0	0.160	.0330	-.0111	0.021	-.0074	.0027	.0055	.0004	.0000
03.3	00.0	0.155	.0331	-.0097	0.000	-.0002	-.0005	.0053	.0004	.0000
03.3	01.9	0.152	.0331	-.0090	-0.021	.0069	-.0034	.0052	.0004	.0000
03.3	03.9	0.151	.0330	-.0093	-0.045	.0151	-.0066	.0054	.0005	.0000
03.3	05.9	0.149	.0327	-.0095	-0.069	.0237	-.0097	.0055	.0006	.0000
					M = 1.60					
-04.1	00.0	-0.186	.0373	.0262	0.002	-.0023	-.0003	.0045	.0010	.0000
-02.0	00.0	-0.094	.0277	.0164	0.003	-.0022	-.0004	.0044	.0007	.0000
00.1	00.0	-0.005	.0244	.0056	0.003	-.0019	-.0005	.0043	.0005	.0000
02.2	00.0	0.091	.0281	-.0053	0.003	-.0014	-.0005	.0043	.0003	.0000
04.4	00.0	0.196	.0388	-.0164	0.003	-.0011	-.0006	.0044	.0001	.0000
08.7	-00.1	0.397	.0837	-.0344	0.004	-.0007	-.0010	.0045	-.0001	.0000
03.3	-06.1	0.137	.0317	-.0117	0.068	-.0231	.0072	.0049	.0004	.0000
03.3	-04.1	0.138	.0319	-.0112	0.046	-.0160	.0049	.0048	.0003	.0000
03.3	-02.1	0.139	.0322	-.0109	0.023	-.0082	.0023	.0045	.0002	.0000
03.3	-00.1	0.143	.0324	-.0110	0.004	-.0014	-.0005	.0044	.0002	.0000
03.3	01.8	0.146	.0327	-.0120	-0.017	.0054	-.0034	.0044	.0002	.0000
03.3	03.9	0.145	.0325	-.0124	-0.039	.0126	-.0063	.0046	.0002	.0000
03.3	05.9	0.149	.0324	-.0132	-0.061	.0198	-.0092	.0050	.0003	.0000
03.4	07.8	0.151	.0324	-.0140	-0.086	.0267	-.0114	.0052	.0004	.0000
					M = 2.00					
-04.0	00.0	-0.158	.0358	.0220	0.003	-.0025	-.0005	.0028	.0007	.0000
-01.9	00.0	-0.082	.0268	.0140	0.003	-.0022	-.0007	.0034	.0006	.0000
00.2	-00.1	-0.003	.0239	.0047	0.003	-.0020	-.0011	.0034	.0004	.0000
02.3	-00.1	0.079	.0275	-.0039	0.003	-.0018	-.0015	.0034	.0002	.0000
04.4	-00.1	0.162	.0367	-.0116	0.004	-.0015	-.0015	.0034	.0002	.0000
08.7	-00.1	0.325	.0739	-.0263	0.004	-.0011	-.0013	.0036	.0000	.0000
03.4	-06.1	0.120	.0318	-.0067	0.061	-.0160	.0044	.0038	.0005	.0000
03.4	-04.1	0.125	.0319	-.0073	0.041	-.0113	.0024	.0038	.0003	.0000
03.4	-02.1	0.124	.0316	-.0076	0.021	-.0062	.0004	.0036	.0002	.0000
03.4	00.0	0.126	.0316	-.0084	0.004	-.0016	-.0015	.0035	.0002	.0000
03.4	01.8	0.130	.0319	-.0091	-0.014	.0033	-.0033	.0035	.0002	.0000
03.4	03.9	0.131	.0320	-.0094	-0.034	.0081	-.0051	.0036	.0003	.0000
03.4	05.9	0.130	.0318	-.0090	-0.055	.0130	-.0068	.0038	.0004	.0000
03.5	07.9	0.130	.0318	-.0099	-0.076	.0175	-.0082	.0041	.0004	.0000

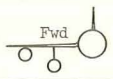
TABLE IV.- AERODYNAMIC CHARACTERISTICS OF MODEL 2 ($F_1W_1C_1V_1N_2$) - Concluded

(c) Mass-flow configuration N_{2C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 2.50										
-04.3	00.0	-0.134	.0335	.0157	0.001	-.0016	-.0001	.0035	.0006	.0000
-02.2	00.0	-0.070	.0260	.0105	0.001	-.0013	-.0005	.0035	.0006	.0000
-00.1	00.0	-0.004	.0229	.0039	0.001	-.0010	-.0008	.0035	.0006	.0000
01.9	00.0	0.063	.0252	-.0021	0.002	-.0007	-.0011	.0035	.0005	.0000
04.0	00.0	0.130	.0325	-.0074	0.002	-.0005	-.0013	.0035	.0005	.0000
08.2	00.0	0.264	.0618	-.0166	0.004	-.0001	-.0017	.0037	.0002	.0000
02.9	-06.0	0.096	.0292	-.0051	0.052	-.0090	.0030	.0035	.0004	.0000
02.9	-04.0	0.096	.0287	-.0053	0.034	-.0062	.0015	.0035	.0005	.0000
02.9	-02.0	0.095	.0284	-.0049	0.018	-.0033	.0001	.0035	.0004	.0000
02.9	00.0	0.096	.0283	-.0048	0.002	-.0006	-.0012	.0035	.0004	.0000
02.9	02.0	0.097	.0282	-.0051	-0.015	.0025	-.0025	.0035	.0004	.0000
02.9	04.0	0.096	.0282	-.0052	-0.031	.0055	-.0039	.0036	.0004	.0000
02.9	06.0	0.096	.0282	-.0055	-0.048	.0080	-.0051	.0037	.0004	.0000
02.9	08.0	0.095	.0283	-.0061	-0.068	.0103	-.0061	.0038	.0004	.0000
M = 3.00										
-04.2	00.1	-0.111	.0308	.0112	0.000	-.0010	.0001	.0029	.0005	.0000
-02.2	00.1	-0.056	.0242	.0075	0.000	-.0007	-.0002	.0030	.0005	.0000
-00.1	00.1	-0.000	.0217	.0033	0.000	-.0005	-.0005	.0029	.0005	.0000
01.9	00.1	0.056	.0238	-.0003	0.001	-.0003	-.0009	.0029	.0005	.0000
03.9	00.1	0.112	.0301	-.0037	0.002	-.0002	-.0012	.0029	.0005	.0000
08.1	00.1	0.227	.0548	-.0111	0.003	.0003	-.0015	.0030	.0004	.0000
02.8	-06.0	0.084	.0274	-.0030	0.049	-.0047	.0026	.0029	.0005	.0000
02.8	-04.0	0.084	.0271	-.0026	0.032	-.0034	.0014	.0029	.0004	.0000
02.9	-01.9	0.084	.0268	-.0021	0.016	-.0017	.0001	.0029	.0004	.0000
02.9	00.1	0.083	.0264	-.0021	0.001	-.0002	-.0011	.0029	.0005	.0000
03.0	02.1	0.084	.0265	-.0025	-0.013	.0016	-.0023	.0029	.0005	.0000
03.0	04.2	0.083	.0268	-.0032	-0.028	.0033	-.0036	.0029	.0004	.0000
03.0	06.3	0.084	.0269	-.0042	-0.048	.0042	-.0047	.0030	.0004	.0000
03.1	08.3	0.085	.0271	-.0048	-0.063	.0054	-.0058	.0031	.0004	.0000
M = 3.50										
-04.2	00.0	-0.094	.0283	.0072	-0.000	-.0008	.0004	.0025	.0004	.0000
-02.2	00.0	-0.047	.0227	.0047	0.000	-.0005	.0000	.0025	.0004	.0000
-00.1	00.0	0.001	.0205	.0024	-0.001	-.0003	-.0004	.0024	.0004	.0000
01.9	00.0	0.049	.0223	.0002	0.000	-.0002	-.0008	.0024	.0004	.0000
03.9	00.0	0.096	.0277	-.0016	0.002	.0000	-.0011	.0024	.0004	.0000
08.0	00.0	0.193	.0494	-.0058	0.003	.0003	-.0016	.0024	.0003	.0000
02.5	-06.4	0.073	.0257	-.0015	0.049	-.0032	.0024	.0024	.0003	.0000
02.6	-04.2	0.073	.0252	-.0012	0.031	-.0025	.0014	.0024	.0003	.0000
02.7	-02.1	0.071	.0248	-.0008	0.016	-.0015	.0002	.0024	.0003	.0000
02.9	00.0	0.072	.0245	-.0009	0.001	-.0001	-.0009	.0024	.0003	.0000
03.0	02.1	0.073	.0245	-.0014	-0.014	.0017	-.0022	.0024	.0003	.0000
03.2	04.3	0.073	.0247	-.0022	-0.028	.0026	-.0034	.0024	.0003	.0000
03.3	06.4	0.074	.0248	-.0029	-0.042	.0023	-.0044	.0024	.0003	.0000
03.4	08.6	0.074	.0253	-.0031	-0.061	.0020	-.0054	.0024	.0003	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$)

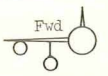
(a) Mass-flow configuration N_{3A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 0.65										
-04.3	00.0	-0.223	.0298	.0020	0.000	-.0004	.0003	.0020	.0000	.0000
-02.1	00.0	-0.118	.0189	.0039	0.000	-.0003	.0003	.0018	.0000	.0000
00.0	00.0	-0.018	.0154	.0047	0.000	-.0000	.0003	.0017	.0000	.0000
02.1	00.0	0.088	.0178	.0073	-0.001	.0002	.0002	.0019	.0000	.0000
04.3	00.0	0.198	.0286	.0114	-0.001	.0001	.0003	.0019	.0000	.0000
08.7	00.0	0.429	.0773	.0241	0.000	.0004	.0001	.0022	.0000	.0000
03.2	-04.0	0.144	.0217	.0085	0.045	-.0108	.0067	.0022	.0000	.0000
03.2	-02.1	0.146	.0221	.0088	0.021	-.0047	.0034	.0021	.0000	.0000
03.2	00.0	0.147	.0222	.0088	0.001	.0002	.0002	.0020	.0000	.0000
03.2	01.9	0.145	.0223	.0085	-0.020	.0047	-.0028	.0020	.0000	.0000
03.2	03.9	0.143	.0220	.0075	-0.044	.0108	-.0060	.0021	.0000	.0000
03.2	05.9	0.142	.0215	.0069	-0.070	.0179	-.0091	.0024	.0000	.0000
03.2	07.9	0.142	.0213	.0057	-0.097	.0248	-.0117	.0027	.0000	.0000
M = 0.85										
-04.4	00.0	-0.248	.0324	.0066	0.000	-.0003	.0004	.0017	.0000	.0000
-02.2	00.0	-0.128	.0194	.0063	0.001	-.0003	.0003	.0018	.0000	.0000
00.0	00.0	-0.017	.0155	.0052	0.000	.0000	.0004	.0018	.0000	.0000
02.2	00.0	0.100	.0187	.0058	0.000	.0003	.0003	.0019	.0000	.0000
04.4	00.0	0.224	.0311	.0082	0.000	.0001	.0004	.0021	.0000	.0000
08.9	00.0	0.472	.0865	.0176	0.000	.0004	.0003	.0022	.0000	.0000
03.3	-04.1	0.161	.0229	.0064	0.047	-.0114	.0075	.0022	.0000	.0000
03.3	-02.0	0.163	.0233	.0070	0.022	-.0051	.0040	.0023	.0000	.0000
03.3	00.0	0.160	.0234	.0070	-0.001	-.0000	.0004	.0020	.0000	.0000
03.3	01.9	0.156	.0232	.0066	-0.022	.0048	-.0030	.0021	.0000	.0000
03.3	03.9	0.154	.0228	.0059	-0.047	.0111	-.0065	.0022	.0000	.0000
03.3	05.9	0.153	.0225	.0054	-0.074	.0186	-.0101	.0023	.0000	.0000
03.3	07.9	0.154	.0224	.0046	-0.101	.0259	-.0129	.0025	.0000	.0000
M = 0.95										
-04.4	00.0	-0.271	.0353	.0130	0.001	-.0007	.0007	.0018	.0000	.0000
-02.2	00.0	-0.138	.0210	.0071	0.001	-.0004	.0003	.0017	.0000	.0000
00.0	00.0	-0.017	.0162	.0038	0.001	.0000	.0004	.0019	.0000	.0000
02.2	00.0	0.117	.0204	-.0016	0.000	.0003	.0003	.0019	.0000	.0000
04.5	00.0	0.252	.0346	-.0030	0.001	.0000	.0004	.0020	.0000	.0000
09.1	00.0	0.528	.0981	-.0043	0.001	.0005	.0006	.0023	.0000	.0000
M = 1.00										
-04.4	00.0	-0.285	.0418	.0280	0.000	-.0004	.0003	.0013	.0000	.0000
-02.2	00.0	-0.148	.0269	.0151	0.000	-.0003	.0003	.0011	.0000	.0000
00.0	00.0	-0.018	.0217	.0034	0.001	.0000	.0004	.0011	.0000	.0000
02.2	00.0	0.119	.0255	-.0060	-0.001	.0003	.0003	.0012	.0000	.0000
04.5	00.0	0.261	.0403	-.0142	0.000	.0001	.0005	.0013	.0000	.0000
09.1	00.0	0.548	.1046	-.0301	0.001	.0004	.0003	.0020	.0000	.0000
03.3	-04.1	0.191	.0305	-.0105	0.049	-.0127	.0081	.0018	.0000	.0000
03.3	-02.1	0.193	.0308	-.0102	0.024	-.0056	.0042	.0017	.0000	.0000
03.3	00.0	0.189	.0309	-.0102	0.000	.0000	.0004	.0014	.0000	.0000
03.3	01.9	0.187	.0308	-.0102	-0.023	.0053	-.0031	.0015	.0000	.0000
03.3	03.9	0.189	.0308	-.0111	-0.050	.0123	-.0071	.0016	.0000	.0000
03.3	05.9	0.191	.0306	-.0126	-0.078	.0203	-.0115	.0019	.0000	.0000
03.3	07.9	0.193	.0304	-.0145	-0.106	.0281	-.0149	.0024	.0000	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

(a) Mass-flow configuration N_{3A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Continued



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.4	00.0	-0.252	.0393	.0380	0.001	-.0005	.0004	.0057	.0000	.0000
-02.2	00.0	-0.133	.0257	.0256	0.000	-.0004	.0004	.0055	.0000	.0000
00.0	00.0	-0.014	.0209	.0120	-0.000	.0000	.0004	.0055	.0000	.0000
02.2	00.0	0.109	.0251	-.0004	-0.001	.0003	.0002	.0053	.0000	.0000
04.5	00.0	0.236	.0389	-.0121	-0.001	.0000	.0003	.0054	.0000	.0000
09.0	00.0	0.485	.0956	-.0327	0.000	.0004	.0001	.0064	.0000	.0000
03.4	-04.1	0.175	.0302	-.0076	0.051	-.0132	.0082	.0059	.0000	.0000
03.4	-02.0	0.177	.0306	-.0067	0.025	-.0060	.0042	.0058	.0000	.0000
03.4	00.0	0.175	.0307	-.0062	-0.000	.0001	.0002	.0057	.0000	.0000
03.4	01.9	0.173	.0307	-.0067	-0.025	.0059	-.0036	.0057	.0000	.0000
03.4	03.9	0.174	.0305	-.0082	-0.053	.0132	-.0076	.0057	.0000	.0000
03.4	05.9	0.173	.0303	-.0101	-0.081	.0212	-.0112	.0058	.0000	.0000
03.4	08.0	0.175	.0301	-.0125	-0.110	.0285	-.0142	.0061	.0000	.0000
					M = 1.40					
-04.4	00.0	-0.227	.0368	.0342	-0.001	.0004	.0000	.0054	.0000	.0000
-02.1	00.0	-0.114	.0244	.0223	0.000	.0005	.0000	.0052	.0000	.0000
00.0	00.0	-0.000	.0203	.0077	0.000	.0006	.0001	.0052	.0000	.0000
02.2	00.0	0.114	.0245	-.0037	-0.001	.0007	.0000	.0051	.0000	.0000
04.5	00.0	0.232	.0378	-.0127	0.000	.0005	.0001	.0051	.0000	.0000
09.0	00.0	0.456	.0911	-.0290	0.000	.0009	-.0000	.0054	.0000	.0000
03.4	-04.1	0.173	.0294	-.0095	0.052	-.0127	.0079	.0055	.0000	.0000
03.4	-02.1	0.174	.0297	-.0087	0.025	-.0058	.0040	.0055	.0000	.0000
03.4	00.0	0.172	.0297	-.0083	-0.001	.0004	.0001	.0053	.0000	.0000
03.4	01.9	0.169	.0297	-.0083	-0.026	.0063	-.0036	.0052	.0000	.0000
03.4	03.9	0.168	.0294	-.0095	-0.054	.0134	-.0075	.0054	.0000	.0000
03.4	05.9	0.167	.0291	-.0105	-0.082	.0207	-.0111	.0055	.0000	.0000
03.4	08.0	0.165	.0286	-.0119	-0.111	.0275	-.0140	.0057	.0000	.0000
					M = 1.60					
-04.2	00.0	-0.189	.0326	.0324	-0.001	-.0002	.0004	.0044	.0000	.0000
-02.0	00.0	-0.093	.0224	.0211	0.000	-.0005	.0001	.0043	.0000	.0000
00.0	00.0	0.001	.0188	.0092	0.001	-.0004	.0001	.0043	.0000	.0000
02.2	00.0	0.102	.0229	-.0048	0.002	-.0003	-.0002	.0043	.0000	.0000
04.3	00.0	0.208	.0343	-.0170	0.002	-.0003	-.0003	.0043	.0000	.0000
08.7	00.0	0.413	.0806	-.0343	0.002	.0002	-.0004	.0046	.0000	.0000
03.3	-06.0	0.152	.0272	-.0122	0.081	-.0188	.0089	.0049	.0000	.0000
03.3	-04.0	0.156	.0276	-.0115	0.054	-.0128	.0060	.0047	.0000	.0000
03.3	-01.9	0.152	.0276	-.0109	0.026	-.0062	.0028	.0045	.0000	.0000
03.3	00.0	0.156	.0277	-.0113	0.002	-.0004	-.0003	.0043	.0000	.0000
03.3	02.0	0.159	.0280	-.0114	-0.025	.0058	-.0032	.0044	.0000	.0000
03.3	04.0	0.160	.0280	-.0123	-0.052	.0123	-.0063	.0045	.0000	.0000
03.3	06.0	0.160	.0280	-.0131	-0.077	.0180	-.0093	.0048	.0000	.0000
03.4	08.0	0.163	.0283	-.0141	-0.107	.0240	-.0117	.0051	.0000	.0000
					M = 2.00					
-04.0	00.1	-0.154	.0291	.0241	0.000	-.0003	.0001	.0036	.0000	.0000
-01.9	00.0	-0.078	.0208	.0173	0.000	-.0003	.0001	.0036	.0000	.0000
00.2	00.0	0.001	.0177	.0078	0.001	-.0003	-.0001	.0035	.0000	.0000
02.3	00.0	0.088	.0217	-.0021	0.001	-.0002	.0000	.0036	.0000	.0000
04.4	00.0	0.173	.0312	-.0111	0.001	-.0002	-.0000	.0036	.0000	.0000
08.7	00.0	0.341	.0701	-.0255	0.001	-.0000	.0001	.0038	.0000	.0000
03.4	-06.0	0.131	.0259	-.0076	0.074	-.0127	.0061	.0038	.0000	.0000
03.4	-04.0	0.134	.0259	-.0071	0.050	-.0089	.0042	.0037	.0000	.0000
03.4	-01.9	0.134	.0259	-.0072	0.025	-.0044	.0020	.0037	.0000	.0000
03.4	00.0	0.135	.0259	-.0073	0.001	-.0000	.0001	.0036	.0000	.0000
03.4	02.0	0.138	.0263	-.0077	-0.022	.0040	-.0020	.0037	.0000	.0000
03.4	04.0	0.138	.0264	-.0085	-0.047	.0083	-.0041	.0037	.0000	.0000
03.4	06.0	0.139	.0264	-.0090	-0.072	.0120	-.0059	.0038	.0000	.0000
03.5	08.1	0.141	.0270	-.0100	-0.100	.0158	-.0075	.0039	.0000	.0000

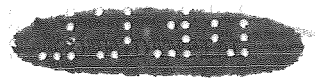
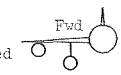


TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

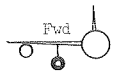
(a) Mass-flow configuration N_{3A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Concluded



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 2.50										
-04.3	00.0	-0.134	.0277	.0158	-0.002	.0003	.0002	.0035	.0000	.0000
-02.2	00.0	-0.069	.0199	.0104	-0.002	.0003	.0002	.0035	.0000	.0000
-00.1	00.0	-0.003	.0166	.0039	-0.001	.0002	.0002	.0035	.0000	.0000
01.9	00.0	0.065	.0188	-.0025	0.000	.0001	.0002	.0036	.0000	.0000
04.0	00.0	0.135	.0261	-.0078	0.000	.0001	.0002	.0036	.0000	.0000
08.2	00.0	0.273	.0561	-.0175	-0.001	.0000	.0001	.0038	.0000	.0000
02.9	-06.0	0.100	.0220	-.0068	0.064	-.0071	.0044	.0037	.0000	.0000
02.9	-04.0	0.100	.0219	-.0063	0.042	-.0050	.0030	.0037	.0000	.0000
03.0	-02.0	0.099	.0217	-.0055	0.020	-.0024	.0015	.0037	.0000	.0000
03.0	00.0	0.100	.0217	-.0052	-0.000	.0001	.0002	.0036	.0000	.0000
03.0	02.0	0.101	.0219	-.0057	-0.021	.0027	-.0012	.0036	.0000	.0000
03.0	04.0	0.101	.0221	-.0066	-0.042	.0053	-.0027	.0036	.0000	.0000
03.0	06.0	0.101	.0222	-.0075	-0.064	.0073	-.0039	.0037	.0000	.0000
02.9	08.0	0.101	.0224	-.0083	-0.088	.0087	-.0050	.0037	.0000	.0000
M = 3.00										
-04.2	00.1	-0.110	.0248	.0112	-0.001	.0001	.0001	.0029	.0000	.0000
-02.2	00.1	-0.055	.0178	.0074	0.000	.0000	.0001	.0030	.0000	.0000
-00.1	00.1	0.001	.0149	.0027	0.000	.0001	.0001	.0030	.0000	.0000
01.9	00.1	0.059	.0170	-.0016	0.000	.0000	.0001	.0029	.0000	.0000
04.0	00.1	0.117	.0235	-.0055	0.000	.0000	.0001	.0029	.0000	.0000
08.1	00.1	0.237	.0497	-.0130	0.000	-.0001	.0001	.0029	.0000	.0000
02.8	-06.0	0.089	.0201	-.0060	0.058	-.0032	.0039	.0031	.0000	.0000
02.8	-04.0	0.088	.0198	-.0047	0.038	-.0025	.0026	.0031	.0000	.0000
02.9	-01.9	0.086	.0195	-.0037	0.018	-.0015	.0014	.0031	.0000	.0000
02.9	00.1	0.088	.0196	-.0036	0.000	.0000	.0001	.0030	.0000	.0000
03.0	02.1	0.088	.0199	-.0038	-0.019	.0015	-.0012	.0030	.0000	.0000
03.0	04.2	0.089	.0203	-.0047	-0.038	.0027	-.0024	.0030	.0000	.0000
03.1	06.3	0.090	.0205	-.0061	-0.059	.0033	-.0036	.0031	.0000	.0000
03.1	08.4	0.091	.0213	-.0074	-0.082	.0042	-.0047	.0031	.0000	.0000
04.9	-06.0	0.149	.0285	-.0107	0.059	-.0012	.0037	.0031	.0000	.0000
04.9	-04.0	0.147	.0281	-.0089	0.038	-.0011	.0026	.0031	.0000	.0000
05.0	-01.9	0.145	.0280	-.0076	0.019	-.0010	.0014	.0031	.0000	.0000
05.0	00.1	0.147	.0283	-.0074	0.000	.0000	.0001	.0030	.0000	.0000
05.1	02.1	0.147	.0285	-.0076	-0.019	.0008	-.0011	.0030	.0000	.0000
05.1	04.2	0.148	.0291	-.0090	-0.039	.0011	-.0023	.0030	.0000	.0000
05.2	06.3	0.150	.0295	-.0106	-0.059	.0012	-.0034	.0031	.0000	.0000
05.2	08.4	0.151	.0302	-.0118	-0.083	.0020	-.0047	.0031	.0000	.0000
M = 3.50										
-04.2	00.0	-0.091	.0220	.0058	-0.002	.0004	.0002	.0023	.0000	.0000
-02.2	00.0	-0.044	.0160	.0039	-0.002	.0003	.0002	.0023	.0000	.0000
-00.1	00.0	0.003	.0136	.0016	-0.002	.0003	.0001	.0023	.0000	.0000
01.9	00.0	0.051	.0153	-.0015	-0.001	.0001	.0001	.0023	.0000	.0000
03.9	00.0	0.102	.0209	-.0042	0.000	.0002	.0001	.0023	.0000	.0000
08.1	00.0	0.205	.0438	-.0095	0.000	.0002	.0001	.0023	.0000	.0000
02.5	-06.4	0.079	.0179	-.0057	0.055	-.0018	.0036	.0024	.0000	.0000
02.6	-04.2	0.077	.0177	-.0042	0.037	-.0020	.0025	.0024	.0000	.0000
02.8	-02.1	0.075	.0174	-.0031	0.018	-.0011	.0013	.0024	.0000	.0000
02.9	00.0	0.077	.0176	-.0028	0.000	.0002	.0001	.0024	.0000	.0000
03.0	02.1	0.077	.0179	-.0032	-0.020	.0015	-.0011	.0024	.0000	.0000
03.2	04.3	0.078	.0184	-.0043	-0.038	.0023	-.0023	.0024	.0000	.0000
03.3	06.4	0.079	.0190	-.0060	-0.057	.0020	-.0033	.0024	.0000	.0000
03.4	08.6	0.082	.0198	-.0072	-0.078	.0015	-.0044	.0024	.0000	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

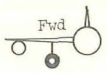
(b) Mass-flow configuration N_{3B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 0.65										
-04.3	00.0	-0.224	.0324	.0012	-0.001	-.0009	.0003	.0019	.0010	.0000
-02.1	00.0	-0.120	.0215	.0031	0.000	-.0008	.0004	.0017	.0009	.0000
00.0	00.0	-0.020	.0177	.0036	0.000	-.0004	.0004	.0018	.0007	.0000
02.1	00.0	0.087	.0203	.0059	-0.001	-.0001	.0002	.0020	.0005	.0000
04.3	00.0	0.198	.0312	.0095	0.000	-.0001	.0002	.0019	.0003	.0000
08.7	00.0	0.424	.0789	.0220	0.001	.0002	.0002	.0024	.0001	.0000
03.2	-04.1	0.143	.0241	.0068	0.044	-.0110	.0065	.0023	.0004	.0000
03.2	-02.0	0.144	.0247	.0074	0.021	-.0051	.0034	.0020	.0004	.0000
03.2	00.0	0.140	.0247	.0074	0.000	-.0003	.0003	.0020	.0004	.0000
03.2	01.9	0.138	.0245	.0068	-0.021	.0043	-.0026	.0020	.0004	.0000
03.2	03.9	0.138	.0242	.0056	-0.045	.0104	-.0058	.0021	.0005	.0000
03.2	05.9	0.137	.0239	.0047	-0.070	.0176	-.0089	.0022	.0006	.0000
M = 0.85										
-04.4	00.0	-0.244	.0346	.0048	-0.001	-.0008	.0003	.0018	.0010	.0000
-02.1	00.0	-0.127	.0218	.0044	0.000	-.0007	.0002	.0019	.0010	.0000
00.0	00.0	-0.017	.0179	.0031	0.000	-.0003	.0003	.0019	.0008	.0000
02.1	00.0	0.100	.0213	.0033	0.000	.0001	.0002	.0018	.0005	.0000
04.4	00.0	0.222	.0338	.0052	0.000	-.0001	.0002	.0019	.0004	.0000
08.9	00.0	0.464	.0878	.0156	0.001	.0000	.0004	.0023	.0001	.0000
03.3	-04.1	0.159	.0254	.0036	0.046	-.0116	.0073	.0022	.0004	.0000
03.3	-02.1	0.160	.0257	.0042	0.021	-.0053	.0039	.0022	.0004	.0000
03.3	00.0	0.156	.0257	.0044	-0.001	-.0003	.0004	.0021	.0004	.0000
03.3	01.9	0.155	.0255	.0040	-0.022	.0046	-.0029	.0022	.0004	.0000
03.3	03.9	0.153	.0254	.0029	-0.047	.0111	-.0065	.0021	.0004	.0000
03.3	05.9	0.152	.0248	.0025	-0.073	.0186	-.0100	.0023	.0005	.0000
M = 0.95										
-04.5	00.0	-0.270	.0380	.0110	0.000	-.0013	.0006	.0018	.0026	.0000
-02.2	00.0	-0.137	.0231	.0039	0.000	-.0011	.0005	.0019	.0019	.0000
00.0	00.0	-0.017	.0186	.0003	0.000	-.0003	.0005	.0019	.0010	.0000
02.2	00.0	0.115	.0225	-.0049	-0.001	.0001	.0004	.0020	.0006	.0000
04.4	00.0	0.249	.0366	-.0071	-0.001	.0000	.0004	.0020	.0004	.0000
09.0	00.0	0.515	.0981	-.0023	0.000	.0002	-.0003	.0025	.0001	.0000
M = 1.00										
-04.5	00.0	-0.286	.0451	.0257	0.000	-.0010	.0002	.0010	.0024	.0000
-02.2	00.0	-0.150	.0287	.0111	0.000	-.0011	.0000	.0012	.0021	.0000
00.0	00.0	-0.023	.0240	.0004	-0.001	-.0003	.0005	.0012	.0012	.0000
02.2	00.0	0.113	.0270	-.0089	-0.001	.0001	.0003	.0013	.0010	.0000
04.5	00.0	0.257	.0418	-.0183	-0.001	.0000	.0004	.0013	.0005	.0000
09.1	00.0	0.545	.1071	-.0341	0.000	-.0001	-.0002	.0019	.0000	.0000
03.3	-04.0	0.188	.0324	-.0149	0.047	-.0126	.0078	.0018	.0008	.0000
03.3	-02.1	0.188	.0326	-.0141	0.022	-.0057	.0040	.0016	.0007	.0000
03.3	00.0	0.188	.0327	-.0138	-0.001	-.0001	.0004	.0016	.0007	.0000
03.3	01.9	0.184	.0331	-.0143	-0.024	.0052	-.0030	.0013	.0007	.0000
03.3	03.9	0.186	.0322	-.0148	-0.050	.0123	-.0067	.0020	.0007	.0000
03.3	05.9	0.188	.0325	-.0163	-0.078	.0203	-.0110	.0020	.0007	.0000
M = 1.10										
-02.2	00.0	-0.155	.0307	.0236	0.000	-.0007	-.0002	.0055	.0016	.0000
00.0	00.0	-0.031	.0255	.0099	-0.001	-.0002	.0001	.0053	.0016	.0000
02.2	00.0	0.104	.0288	-.0037	-0.002	.0002	.0001	.0053	.0014	.0000

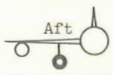
TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

(b) Mass-flow configuration N_{3B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ - Continued



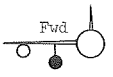
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.25										
-04.4	00.0	-0.258	.0436	.0393	-0.001	-.0007	.0000	.0060	.0015	.0000
-02.2	00.0	-0.139	.0297	.0267	0.000	-.0007	-.0001	.0056	.0014	.0000
00.0	00.0	-0.021	.0251	.0122	-0.001	-.0003	-.0004	.0053	.0010	.0000
02.2	00.0	0.104	.0286	-.0011	-0.002	.0003	-.0007	.0053	.0008	.0000
04.5	00.0	0.232	.0419	-.0137	-0.001	.0002	-.0003	.0057	.0006	.0000
09.0	00.0	0.481	.0981	-.0351	-0.001	.0006	.0001	.0063	.0004	.0000
03.4	-04.0	0.169	.0333	-.0086	0.049	-.0132	.0074	.0059	.0006	.0000
03.4	-02.0	0.170	.0336	-.0079	0.023	-.0060	.0034	.0058	.0006	.0000
03.4	00.0	0.166	.0337	-.0074	-0.001	.0000	-.0004	.0057	.0006	.0000
03.4	01.9	0.168	.0341	-.0081	-0.025	.0060	-.0041	.0056	.0007	.0000
03.4	03.9	0.168	.0338	-.0093	-0.052	.0131	-.0079	.0059	.0008	.0000
03.4	06.0	0.168	.0337	-.0105	-0.080	.0211	-.0114	.0060	.0009	.0000
03.4	08.0	0.170	.0334	-.0126	-0.108	.0285	-.0142	.0063	.0011	.0000
M = 1.40										
-04.4	00.0	-0.230	.0414	.0360	-0.002	.0004	-.0003	.0053	.0013	.0000
-02.2	00.0	-0.121	.0288	.0244	-0.002	.0006	-.0003	.0053	.0013	.0000
00.0	00.0	-0.008	.0244	.0099	-0.002	.0008	-.0002	.0052	.0011	.0000
02.2	00.0	0.105	.0281	-.0019	-0.002	.0008	-.0003	.0051	.0008	.0000
04.5	00.0	0.221	.0410	-.0120	-0.001	.0005	-.0002	.0051	.0005	.0000
09.0	00.0	0.444	.0927	-.0300	0.000	.0009	.0000	.0054	.0003	.0000
03.4	-04.1	0.165	.0329	-.0091	0.050	-.0126	.0071	.0056	.0004	.0000
03.4	-02.1	0.166	.0334	-.0082	0.023	-.0057	.0034	.0055	.0004	.0000
03.4	00.0	0.164	.0335	-.0071	-0.002	.0005	-.0003	.0053	.0003	.0000
03.4	01.9	0.160	.0335	-.0069	-0.027	.0065	-.0038	.0053	.0004	.0000
03.4	03.9	0.162	.0335	-.0083	-0.053	.0134	-.0076	.0054	.0005	.0000
03.4	05.9	0.161	.0328	-.0097	-0.081	.0207	-.0114	.0056	.0007	.0000
03.3	08.0	0.159	.0324	-.0114	-0.109	.0272	-.0143	.0058	.0009	.0000
M = 1.60										
-04.2	00.1	-0.188	.0373	.0335	0.002	-.0016	.0002	.0044	.0011	.0000
-02.0	00.0	-0.093	.0270	.0220	0.003	-.0014	.0001	.0043	.0011	.0000
00.0	00.0	-0.002	.0238	.0099	0.004	-.0012	-.0003	.0043	.0009	.0000
02.2	00.0	0.095	.0273	-.0029	0.003	-.0007	-.0005	.0044	.0006	.0000
04.3	00.0	0.199	.0383	-.0151	0.004	-.0005	-.0007	.0043	.0004	.0000
08.7	00.0	0.406	.0842	-.0327	0.004	-.0001	-.0009	.0045	.0000	.0000
03.3	-06.0	0.148	.0318	-.0100	0.080	-.0187	.0087	.0049	.0004	.0000
03.3	-04.0	0.148	.0318	-.0094	0.054	-.0128	.0058	.0048	.0004	.0000
03.3	-01.9	0.147	.0318	-.0089	0.028	-.0063	.0026	.0045	.0004	.0000
03.3	00.0	0.149	.0319	-.0094	0.004	-.0007	-.0006	.0044	.0005	.0000
03.3	02.0	0.154	.0320	-.0108	-0.020	.0050	-.0039	.0045	.0005	.0000
03.3	04.0	0.154	.0318	-.0118	-0.047	.0113	-.0069	.0047	.0006	.0000
03.3	06.0	0.156	.0317	-.0130	-0.074	.0172	-.0098	.0049	.0007	.0000
03.4	08.0	0.160	.0321	-.0145	-0.103	.0231	-.0122	.0052	.0008	.0000
M = 2.00										
-04.0	00.1	-0.156	.0340	.0260	0.002	-.0020	-.0005	.0037	.0007	.0000
-01.9	00.0	-0.079	.0257	.0188	0.003	-.0020	-.0006	.0036	.0007	.0000
00.2	00.0	-0.002	.0228	.0092	0.003	-.0017	-.0008	.0035	.0006	.0000
02.3	00.0	0.082	.0263	-.0006	0.004	-.0016	-.0009	.0036	.0006	.0000
04.4	00.0	0.168	.0357	-.0096	0.004	-.0013	-.0011	.0036	.0006	.0000
08.7	00.0	0.335	.0738	-.0232	0.005	-.0007	-.0012	.0038	.0005	.0000
03.4	-06.0	0.129	.0307	-.0064	0.077	-.0141	.0052	.0038	.0006	.0000
03.4	-03.9	0.131	.0306	-.0062	0.053	-.0103	.0032	.0038	.0006	.0000
03.4	-01.9	0.128	.0303	-.0057	0.028	-.0057	.0011	.0037	.0006	.0000
03.4	00.0	0.131	.0305	-.0061	0.004	-.0014	-.0010	.0036	.0006	.0000
03.4	02.0	0.134	.0307	-.0069	-0.019	.0030	-.0030	.0037	.0006	.0000
03.4	04.0	0.134	.0307	-.0076	-0.044	.0075	-.0051	.0037	.0006	.0000
03.4	06.1	0.136	.0308	-.0085	-0.069	.0116	-.0070	.0038	.0006	.0000
03.4	08.1	0.136	.0310	-.0101	-0.097	.0157	-.0085	.0040	.0007	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

(b) Mass-flow configuration N_{3B}; $m_I/m_\infty \approx 0.3$, $m_O/m_\infty = 1.0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{bF}}$	$C_{D_{bI}}$	$C_{D_{bO}}$
M = 2.50										
-04.3	00.0	-0.131	.0323	.0173	-0.001	-.0010	-.0002	.0036	.0004	.0000
-02.2	00.0	-0.068	.0248	.0120	0.000	-.0010	-.0004	.0035	.0004	.0000
-00.1	00.0	-0.003	.0217	.0052	0.000	-.0007	-.0005	.0035	.0004	.0000
01.9	00.0	0.064	.0239	-.0011	0.001	-.0007	-.0007	.0035	.0004	.0000
04.0	00.0	0.132	.0309	-.0065	0.002	-.0005	-.0010	.0036	.0004	.0000
08.2	00.0	0.267	.0603	-.0167	0.002	-.0002	-.0013	.0037	.0004	.0000
02.9	-06.0	0.100	.0273	-.0059	0.064	-.0085	.0032	.0036	.0004	.0000
02.9	-04.0	0.098	.0269	-.0052	0.042	-.0063	.0018	.0036	.0004	.0000
03.0	-02.0	0.097	.0267	-.0042	0.021	-.0033	.0004	.0035	.0004	.0000
03.0	00.0	0.098	.0268	-.0039	0.001	-.0006	-.0009	.0035	.0004	.0000
03.0	02.0	0.098	.0267	-.0045	-0.019	.0023	-.0022	.0036	.0004	.0000
03.0	04.0	0.098	.0269	-.0054	-0.040	.0051	-.0035	.0037	.0004	.0000
02.9	06.0	0.098	.0269	-.0063	-0.061	.0071	-.0048	.0037	.0004	.0000
02.9	08.0	0.099	.0271	-.0079	-0.084	.0085	-.0058	.0038	.0005	.0000
M = 3.00										
-04.2	00.1	-0.107	.0294	.0124	0.000	-.0009	.0002	.0031	.0002	.0000
-02.2	00.1	-0.053	.0229	.0084	0.000	-.0009	.0000	.0030	.0002	.0000
-00.1	00.1	0.002	.0203	.0037	0.000	-.0006	-.0003	.0030	.0002	.0000
01.9	00.1	0.058	.0221	-.0004	0.001	-.0004	-.0005	.0029	.0002	.0000
04.0	00.1	0.115	.0283	-.0042	0.001	-.0002	-.0009	.0029	.0002	.0000
08.1	00.1	0.231	.0544	-.0118	0.002	.0001	-.0014	.0029	.0002	.0000
02.8	-06.0	0.089	.0255	-.0049	0.057	-.0038	.0029	.0030	.0002	.0000
02.8	-04.0	0.087	.0251	-.0034	0.036	-.0030	.0017	.0030	.0002	.0000
02.9	-01.9	0.086	.0246	-.0024	0.018	-.0018	.0005	.0030	.0002	.0000
02.9	00.1	0.086	.0244	-.0023	0.001	-.0002	-.0007	.0030	.0002	.0000
03.0	02.1	0.086	.0246	-.0026	-0.018	.0015	-.0020	.0030	.0002	.0000
03.0	04.2	0.087	.0250	-.0037	-0.036	.0028	-.0032	.0031	.0003	.0000
03.1	06.3	0.088	.0254	-.0053	-0.055	.0033	-.0044	.0032	.0003	.0000
03.1	08.4	0.089	.0258	-.0068	-0.078	.0041	-.0055	.0032	.0003	.0000
04.8	-06.0	0.145	.0338	-.0086	0.058	-.0020	.0024	.0031	.0002	.0000
04.9	-04.0	0.144	.0332	-.0072	0.037	-.0015	.0012	.0031	.0002	.0000
05.0	-01.9	0.142	.0329	-.0061	0.019	-.0010	.0002	.0031	.0002	.0000
05.0	00.1	0.144	.0331	-.0060	0.002	-.0001	-.0010	.0030	.0002	.0000
05.1	02.1	0.143	.0332	-.0064	-0.017	.0011	-.0023	.0030	.0002	.0000
05.1	04.2	0.144	.0336	-.0077	-0.036	.0016	-.0035	.0031	.0003	.0000
05.1	06.3	0.145	.0339	-.0096	-0.055	.0015	-.0046	.0032	.0003	.0000
05.2	08.4	0.147	.0346	-.0110	-0.078	.0021	-.0057	.0032	.0003	.0000
M = 3.50										
-04.2	00.0	-0.088	.0268	.0070	0.000	-.0008	.0006	.0024	.0002	.0000
-02.2	00.0	-0.042	.0211	.0049	0.000	-.0007	.0003	.0024	.0001	.0000
-00.1	00.0	0.004	.0185	.0025	0.001	-.0004	.0001	.0024	.0001	.0000
01.9	00.0	0.052	.0204	-.0005	0.001	-.0001	-.0004	.0024	.0001	.0000
03.9	00.0	0.100	.0261	-.0032	0.000	.0001	-.0008	.0024	.0001	.0000
08.1	00.0	0.199	.0492	-.0082	0.001	.0005	-.0015	.0024	.0001	.0000
02.5	-06.4	0.079	.0237	-.0039	0.055	-.0025	.0031	.0024	.0001	.0000
02.6	-04.2	0.077	.0232	-.0033	0.036	-.0023	.0019	.0025	.0001	.0000
02.8	-02.1	0.076	.0227	-.0023	0.018	-.0013	.0006	.0025	.0001	.0000
02.9	00.0	0.076	.0227	-.0019	0.001	-.0000	-.0006	.0025	.0001	.0000
03.0	02.1	0.076	.0228	-.0021	-0.017	.0014	-.0018	.0024	.0001	.0000
03.2	04.3	0.077	.0233	-.0032	-0.035	.0019	-.0029	.0024	.0002	.0000
03.3	06.4	0.079	.0238	-.0049	-0.052	.0015	-.0040	.0024	.0002	.0000
03.4	08.5	0.080	.0245	-.0062	-0.072	.0014	-.0053	.0024	.0002	.0000
04.5	-06.4	0.128	.0310	-.0066	0.056	-.0008	.0025	.0025	.0001	.0000
04.7	-04.2	0.127	.0307	-.0060	0.036	-.0007	.0014	.0025	.0001	.0000
04.8	-03.2	0.126	.0305	-.0055	0.027	-.0007	.0008	.0025	.0001	.0000
04.8	-02.1	0.125	.0305	-.0049	0.019	-.0004	.0002	.0025	.0001	.0000
05.0	00.0	0.126	.0306	-.0043	0.001	.0002	-.0010	.0025	.0001	.0000
05.1	02.1	0.126	.0309	-.0047	-0.017	.0010	-.0021	.0024	.0001	.0000
05.2	04.3	0.127	.0314	-.0061	-0.033	.0006	-.0032	.0024	.0002	.0000
05.4	06.4	0.128	.0319	-.0078	-0.051	-.0004	-.0043	.0024	.0002	.0000
05.5	08.6	0.128	.0324	-.0080	-0.072	-.0006	-.0056	.0025	.0002	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

(c) Mass-flow configuration N_{3C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.3	00.0	-0.225	.0338	.0008	-0.001	-.0011	.0002	.0020	.0011	.0000
-02.1	00.0	-0.120	.0230	.0024	-0.000	-.0009	.0002	.0017	.0009	.0000
00.0	00.0	-0.019	.0193	.0029	-0.000	-.0005	.0002	.0018	.0006	.0000
02.1	00.0	0.088	.0221	.0050	-0.000	-.0002	.0000	.0018	.0004	.0000
04.3	00.0	0.193	.0323	.0085	0.000	-.0003	.0002	.0018	.0003	.0000
08.7	00.0	0.420	.0797	.0211	0.001	-.0001	-.0001	.0024	.0002	.0000
03.2	-04.0	0.141	.0254	.0059	0.043	-.0111	.0063	.0017	.0004	.0000
03.2	-02.0	0.141	.0256	.0065	0.020	-.0052	.0032	.0018	.0003	.0000
03.2	00.0	0.139	.0256	.0066	-0.001	-.0004	.0002	.0020	.0003	.0000
03.2	01.9	0.135	.0256	.0060	-0.021	.0042	-.0027	.0016	.0003	.0000
03.2	03.9	0.133	.0249	.0049	-0.045	.0102	-.0057	.0018	.0004	.0000
03.2	05.9	0.133	.0245	.0040	-0.070	.0174	-.0089	.0021	.0006	.0000
					M = 0.85					
-04.4	00.0	-0.247	.0362	.0044	-0.001	-.0011	.0003	.0017	.0012	.0000
-02.2	00.0	-0.133	.0230	.0039	0.000	-.0009	.0004	.0018	.0010	.0000
00.0	00.0	-0.021	.0191	.0023	0.000	-.0005	.0003	.0017	.0008	.0000
02.2	00.0	0.096	.0224	.0024	-0.001	-.0001	.0002	.0018	.0005	.0000
04.4	00.0	0.215	.0337	.0043	0.000	-.0002	.0003	.0020	.0003	.0000
08.9	00.0	0.459	.0880	.0149	0.000	-.0002	.0001	.0022	.0002	.0000
03.3	-04.1	0.156	.0263	.0025	0.045	-.0117	.0071	.0021	.0005	.0000
03.3	-02.0	0.160	.0268	.0029	0.021	-.0054	.0037	.0020	.0004	.0000
03.3	00.0	0.157	.0269	.0031	-0.001	-.0003	.0003	.0020	.0004	.0000
03.3	01.9	0.154	.0270	.0025	-0.022	.0046	-.0030	.0019	.0004	.0000
03.3	03.9	0.152	.0267	.0018	-0.046	.0109	-.0064	.0021	.0005	.0000
03.3	05.9	0.149	.0258	.0016	-0.072	.0184	-.0098	.0023	.0007	.0000
					M = 0.95					
-02.2	00.0	-0.138	.0245	.0036	-0.001	-.0011	.0003	.0018	.0013	.0000
00.0	00.0	-0.019	.0195	.0006	-0.000	-.0005	.0004	.0019	.0011	.0000
02.2	00.0	0.112	.0236	-.0043	-0.002	-.0000	.0002	.0020	.0006	.0000
					M = 1.00					
-04.5	00.0	-0.290	.0453	.0224	-0.000	-.0014	-.0001	.0014	.0021	.0000
-02.2	00.0	-0.151	.0291	.0080	0.000	-.0015	-.0005	.0014	.0018	.0000
00.0	00.0	-0.023	.0237	-.0020	-0.001	-.0006	.0005	.0014	.0013	.0000
02.2	00.0	0.113	.0276	-.0103	-0.002	-.0002	.0003	.0015	.0009	.0000
04.5	00.0	0.258	.0421	-.0183	-0.001	-.0002	.0004	.0017	.0005	.0000
09.0	00.0	0.541	.1072	-.0318	-0.001	-.0004	-.0005	.0017	.0001	.0000
03.3	-04.0	0.188	.0327	-.0152	0.047	-.0128	.0078	.0020	.0008	.0000
03.3	-02.1	0.189	.0331	-.0147	0.022	-.0059	.0040	.0018	.0007	.0000
03.3	00.0	0.186	.0333	-.0146	-0.001	-.0003	.0004	.0017	.0006	.0000
03.3	01.9	0.184	.0333	-.0146	-0.024	.0050	-.0030	.0018	.0007	.0000
03.3	03.9	0.184	.0332	-.0156	-0.050	.0121	-.0068	.0019	.0008	.0000
03.3	05.9	0.187	.0331	-.0171	-0.077	.0200	-.0109	.0022	.0009	.0000

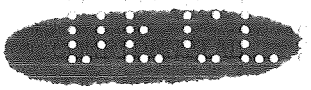
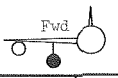


TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Continued

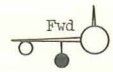
(c) Mass-flow configuration N_{3C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Continued



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.4	00.0	-0.264	.0462	.0402	-0.003	-.0009	-.0000	.0056	.0014	.0000
-02.2	00.0	-0.144	.0316	.0270	-0.002	-.0009	-.0002	.0054	.0012	.0000
00.0	00.0	-0.027	.0266	.0123	-0.002	-.0006	-.0006	.0052	.0009	.0000
02.2	00.0	0.100	.0300	-.0015	-0.002	-.0001	-.0011	.0052	.0008	.0000
04.4	00.0	0.227	.0428	-.0140	-0.002	.0000	-.0006	.0056	.0006	.0000
09.0	00.0	0.476	.0990	-.0360	-0.002	.0006	.0001	.0063	.0003	.0000
03.3	-04.0	0.165	.0342	-.0094	0.048	-.0132	.0068	.0059	.0006	.0000
03.3	-02.0	0.167	.0347	-.0084	0.022	-.0062	.0029	.0058	.0006	.0000
03.3	00.0	0.164	.0350	-.0077	-0.002	-.0002	-.0009	.0056	.0006	.0000
03.3	01.9	0.161	.0350	-.0080	-0.026	.0056	-.0044	.0057	.0007	.0000
03.3	03.9	0.162	.0350	-.0092	-0.053	.0128	-.0081	.0059	.0009	.0000
03.3	05.9	0.163	.0348	-.0105	-0.080	.0208	-.0116	.0061	.0010	.0000
					M = 1.60					
-04.2	00.0	-0.191	.0395	.0346	0.002	-.0021	.0000	.0045	.0009	.0000
-02.1	00.0	-0.099	.0293	.0236	0.003	-.0018	-.0002	.0043	.0006	.0000
00.0	00.0	-0.007	.0254	.0116	0.004	-.0014	-.0005	.0043	.0004	.0000
02.1	00.0	0.091	.0289	-.0016	0.005	-.0010	-.0006	.0044	.0002	.0000
04.3	00.0	0.194	.0396	-.0134	0.004	-.0004	-.0008	.0043	.0001	.0000
08.6	00.0	0.399	.0843	-.0319	0.004	-.0000	-.0010	.0046	-.0001	.0000
03.2	-06.0	0.143	.0331	-.0091	0.080	-.0185	.0085	.0049	.0002	.0000
03.2	-04.0	0.145	.0334	-.0084	0.055	-.0129	.0056	.0047	.0000	.0000
03.2	-02.0	0.143	.0334	-.0076	0.028	-.0065	.0024	.0045	.0000	.0000
03.2	00.0	0.146	.0335	-.0081	0.004	-.0007	-.0007	.0043	.0001	.0000
03.2	02.0	0.148	.0335	-.0094	-0.021	.0051	-.0040	.0044	.0003	.0000
03.2	04.0	0.148	.0332	-.0108	-0.047	.0109	-.0071	.0047	.0005	.0000
03.3	06.0	0.151	.0331	-.0121	-0.074	.0170	-.0100	.0049	.0006	.0000
03.3	08.0	0.153	.0330	-.0131	-0.102	.0226	-.0125	.0052	.0008	.0000
					M = 2.00					
-04.1	00.0	-0.157	.0365	.0271	0.003	-.0029	-.0007	.0036	.0006	.0000
-01.9	00.0	-0.081	.0280	.0199	0.003	-.0025	-.0009	.0035	.0006	.0000
00.1	00.0	-0.002	.0248	.0102	0.004	-.0024	-.0011	.0035	.0005	.0000
02.2	00.0	0.080	.0282	.0005	0.004	-.0020	-.0014	.0035	.0004	.0000
04.4	00.0	0.166	.0373	-.0083	0.005	-.0019	-.0017	.0035	.0002	.0000
08.7	00.0	0.332	.0751	-.0219	0.005	-.0012	-.0019	.0037	.0000	.0000
03.3	-06.0	0.128	.0327	-.0058	0.077	-.0143	.0047	.0039	.0004	.0000
03.3	-04.0	0.129	.0327	-.0053	0.053	-.0106	.0026	.0037	.0002	.0000
03.3	-02.0	0.125	.0323	-.0046	0.028	-.0061	.0004	.0036	.0002	.0000
03.3	00.0	0.126	.0321	-.0048	0.005	-.0019	-.0015	.0036	.0002	.0000
03.3	02.0	0.129	.0324	-.0057	-0.018	.0025	-.0036	.0036	.0004	.0000
03.3	04.0	0.129	.0324	-.0064	-0.044	.0072	-.0056	.0036	.0006	.0000
03.4	06.0	0.131	.0325	-.0074	-0.068	.0114	-.0075	.0038	.0007	.0000
03.4	08.0	0.129	.0323	-.0083	-0.097	.0157	-.0089	.0040	.0007	.0000

TABLE V.- AERODYNAMIC CHARACTERISTICS OF MODEL 3 ($F_1W_1C_1V_1N_3$) - Concluded

(c) Mass-flow configuration N_{3C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Concluded



α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 2.50										
-04.3	00.0	-0.130	.0346	.0179	-0.001	-.0014	-.0003	.0035	.0007	.0000
-02.2	00.0	-0.068	.0272	.0128	-0.000	-.0014	-.0007	.0035	.0006	.0000
-00.1	00.0	-0.003	.0240	.0062	0.000	-.0013	-.0009	.0035	.0006	.0000
01.9	00.0	0.064	.0262	-.0002	0.001	-.0011	-.0012	.0035	.0006	.0000
03.8	00.0	0.122	.0321	-.0050	0.002	-.0010	-.0014	.0035	.0006	.0000
04.0	00.0	0.131	.0334	-.0055	0.002	-.0010	-.0014	.0036	.0006	.0000
06.7	00.0	0.216	.0491	-.0120	0.003	-.0005	-.0017	.0037	.0005	.0000
08.2	00.0	0.265	.0623	-.0157	0.003	-.0004	-.0019	.0037	.0005	.0000
02.9	-06.0	0.100	.0298	-.0054	0.065	-.0089	.0028	.0036	.0005	.0000
02.9	-04.0	0.098	.0293	-.0045	0.043	-.0067	.0013	.0036	.0005	.0000
03.0	-02.0	0.097	.0291	-.0032	0.021	-.0038	-.0001	.0035	.0005	.0000
03.0	00.0	0.097	.0291	-.0030	0.002	-.0010	-.0013	.0035	.0006	.0000
03.0	02.0	0.098	.0291	-.0037	-0.019	.0020	-.0025	.0036	.0006	.0000
03.0	04.0	0.098	.0291	-.0048	-0.040	.0049	-.0038	.0037	.0007	.0000
02.9	06.0	0.098	.0294	-.0055	-0.061	.0070	-.0051	.0037	.0007	.0000
02.9	08.0	0.098	.0293	-.0067	-0.083	.0085	-.0061	.0038	.0007	.0000
M = 3.00										
-04.2	00.1	-0.106	.0319	.0128	-0.000	-.0010	.0002	.0031	.0005	.0000
-02.1	00.1	-0.052	.0255	.0092	-0.000	-.0010	-.0002	.0030	.0005	.0000
-00.1	00.1	0.002	.0228	.0047	-0.000	-.0008	-.0006	.0030	.0005	.0000
01.9	00.1	0.059	.0246	.0005	0.001	-.0005	-.0009	.0029	.0004	.0000
04.0	00.1	0.114	.0308	-.0034	0.001	-.0002	-.0013	.0029	.0004	.0000
08.1	00.1	0.229	.0568	-.0108	0.003	-.0001	-.0019	.0029	.0004	.0000
02.8	-06.0	0.089	.0280	-.0043	0.057	-.0041	.0024	.0031	.0003	.0000
02.8	-04.0	0.087	.0277	-.0026	0.037	-.0032	.0012	.0030	.0004	.0000
02.9	-01.9	0.085	.0272	-.0014	0.018	-.0020	.0001	.0030	.0004	.0000
02.9	00.1	0.086	.0271	-.0015	0.001	-.0004	-.0011	.0030	.0004	.0000
03.0	02.1	0.086	.0272	-.0020	-0.018	.0014	-.0023	.0030	.0004	.0000
03.0	04.2	0.087	.0275	-.0031	-0.036	.0028	-.0035	.0031	.0005	.0000
03.1	06.3	0.088	.0277	-.0047	-0.055	.0035	-.0046	.0032	.0005	.0000
03.1	08.4	0.089	.0282	-.0059	-0.077	.0041	-.0057	.0033	.0005	.0000
M = 3.50										
-04.2	00.0	-0.087	.0294	.0077	-0.001	-.0008	.0006	.0024	.0004	.0000
-02.1	00.0	-0.041	.0238	.0056	-0.001	-.0008	.0002	.0024	.0004	.0000
-00.1	00.0	0.005	.0213	.0031	-0.001	-.0005	-.0001	.0024	.0003	.0000
01.9	00.0	0.052	.0230	.0002	-0.000	-.0001	-.0006	.0024	.0003	.0000
03.9	00.0	0.100	.0291	-.0023	-0.000	.0001	-.0011	.0024	.0003	.0000
08.1	00.0	0.198	.0523	-.0070	0.001	.0003	-.0021	.0024	.0003	.0000
02.5	-06.4	0.079	.0269	-.0033	0.055	-.0027	.0026	.0024	.0003	.0000
02.6	-04.2	0.077	.0262	-.0023	0.036	-.0023	.0015	.0024	.0002	.0000
02.8	-02.1	0.075	.0258	-.0013	0.017	-.0014	.0003	.0024	.0003	.0000
02.9	00.0	0.076	.0256	-.0011	0.000	.0000	-.0009	.0024	.0003	.0000
03.0	02.1	0.076	.0257	-.0015	-0.017	.0013	-.0020	.0024	.0003	.0000
03.2	04.3	0.078	.0260	-.0028	-0.034	.0019	-.0032	.0024	.0003	.0000
03.3	06.4	0.079	.0264	-.0042	-0.051	.0014	-.0042	.0025	.0004	.0000
03.4	08.6	0.080	.0270	-.0055	-0.072	.0012	-.0055	.0025	.0004	.0000

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$)

(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 0.65										
-04.2	-00.1	-0.195	.0281	-.0017	0.000	-.0002	.0001	.0020	.0000	.0000
-02.1	-00.1	-0.103	.0190	.0043	0.000	-.0001	.0000	.0020	.0000	.0000
00.0	-00.1	-0.015	.0160	.0074	0.000	.0000	.0002	.0022	.0000	.0000
02.1	-00.1	0.077	.0182	.0121	-0.001	.0001	.0002	.0022	.0000	.0000
04.3	-00.1	0.175	.0272	.0186	0.000	.0001	.0003	.0022	.0000	.0000
08.6	-00.1	0.379	.0691	.0374	-0.001	.0003	.0000	.0023	.0000	.0000
03.2	-04.2	0.130	.0212	.0139	0.051	-.0086	.0004	.0029	.0000	.0000
03.2	-02.2	0.128	.0215	.0150	0.024	-.0039	.0002	.0026	.0000	.0000
03.2	-00.1	0.126	.0217	.0153	-0.001	.0000	.0003	.0022	.0000	.0000
03.2	01.8	0.124	.0217	.0146	-0.026	.0038	.0005	.0023	.0000	.0000
03.2	03.8	0.124	.0211	.0132	-0.052	.0085	.0005	.0024	.0000	.0000
03.2	05.8	0.125	.0207	.0112	-0.082	.0138	.0004	.0026	.0000	.0000
03.2	07.9	0.127	.0200	.0093	-0.112	.0193	.0005	.0026	.0000	.0000
M = 0.85										
-04.3	-00.1	-0.212	.0300	.0023	0.000	-.0002	.0001	.0019	.0000	.0000
-02.2	-00.1	-0.114	.0195	.0068	0.000	-.0001	.0001	.0020	.0000	.0000
00.0	-00.1	-0.016	.0160	.0082	0.000	.0000	.0002	.0019	.0000	.0000
02.2	-00.1	0.087	.0190	.0115	-0.001	.0001	.0002	.0019	.0000	.0000
04.4	-00.1	0.194	.0293	.0167	0.000	.0001	.0003	.0020	.0000	.0000
08.9	-00.1	0.418	.0774	.0337	0.000	.0003	.0002	.0024	.0000	.0000
03.3	-04.2	0.144	.0227	.0120	0.054	-.0093	.0000	.0024	.0000	.0000
03.3	-02.2	0.142	.0227	.0136	0.026	-.0042	.0000	.0023	.0000	.0000
03.3	-00.1	0.140	.0227	.0139	-0.001	.0000	.0003	.0022	.0000	.0000
03.3	01.8	0.137	.0228	.0135	-0.026	.0041	.0007	.0022	.0000	.0000
03.3	03.8	0.136	.0221	.0115	-0.055	.0091	.0009	.0023	.0000	.0000
03.3	05.8	0.140	.0219	.0090	-0.087	.0151	.0010	.0026	.0000	.0000
03.3	07.9	0.143	.0214	.0065	-0.118	.0210	.0014	.0024	.0000	.0000
M = 0.95										
-04.4	-00.1	-0.220	.0337	.0020	0.001	-.0002	.0003	.0011	.0000	.0000
-02.2	-00.1	-0.110	.0231	.0036	0.001	-.0003	.0000	.0011	.0000	.0000
00.0	-00.1	-0.010	.0193	.0037	0.001	-.0002	.0001	.0011	.0000	.0000
02.2	-00.1	0.100	.0226	.0040	0.000	.0000	.0002	.0010	.0000	.0000
04.4	-00.1	0.221	.0338	.0060	0.000	.0001	.0003	.0013	.0000	.0000
09.0	-00.1	0.475	.0901	.0133	0.000	.0003	.0001	.0019	.0000	.0000
M = 1.00										
-04.4	-00.1	-0.245	.0430	.0246	0.001	-.0003	.0001	.0054	.0000	.0000
-02.1	-00.1	-0.131	.0311	.0197	0.001	-.0002	.0000	.0048	.0000	.0000
00.0	-00.1	-0.024	.0264	.0149	0.001	-.0002	.0001	.0055	.0000	.0000
02.2	-00.1	0.091	.0294	.0116	0.000	.0000	.0002	.0050	.0000	.0000
04.5	-00.1	0.220	.0402	.0049	0.000	.0001	.0002	.0054	.0000	.0000
09.0	-00.1	0.499	.1008	-.0149	-0.001	.0002	.0002	.0060	.0000	.0000
03.3	-04.2	0.155	.0327	.0082	0.058	-.0114	.0004	.0056	.0000	.0000
03.3	-02.1	0.156	.0341	.0084	0.028	-.0053	.0002	.0050	.0000	.0000
03.3	-00.1	0.155	.0333	.0088	-0.001	-.0001	.0003	.0049	.0000	.0000
03.3	01.8	0.151	.0330	.0086	-0.029	.0049	.0004	.0051	.0000	.0000
03.3	03.8	0.151	.0334	.0075	-0.059	.0112	.0003	.0053	.0000	.0000
03.3	05.9	0.148	.0320	.0067	-0.092	.0179	.0002	.0057	.0000	.0000
03.3	07.9	0.145	.0308	.0063	-0.124	.0246	.0003	.0059	.0000	.0000

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Continued

(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ - Continued 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 1.25					
-04.4	-00.1	-0.222	.0383	.0292	0.001	-.0004	.0002	.0074	.0000	.0000
-02.1	-00.1	-0.116	.0266	.0222	0.001	-.0003	.0001	.0073	.0000	.0000
00.0	-00.1	-0.011	.0225	.0108	0.000	-.0002	.0002	.0072	.0000	.0000
02.2	-00.1	0.102	.0259	.0002	-0.001	.0000	.0002	.0071	.0000	.0000
04.5	-00.1	0.223	.0384	-.0099	0.000	.0001	.0002	.0068	.0000	.0000
09.0	-00.1	0.461	.0927	-.0255	-0.001	.0005	.0000	.0067	.0000	.0000
03.4	-04.2	0.163	.0309	-.0047	0.052	-.0093	.0008	.0070	.0000	.0000
03.4	-02.2	0.165	.0309	-.0050	0.025	-.0042	.0003	.0071	.0000	.0000
03.4	-00.1	0.163	.0309	-.0047	-0.001	-.0001	.0002	.0070	.0000	.0000
03.3	01.8	0.159	.0307	-.0045	-0.026	.0039	.0002	.0070	.0000	.0000
03.3	03.9	0.159	.0307	-.0049	-0.053	.0091	-.0002	.0070	.0000	.0000
03.3	05.9	0.157	.0302	-.0050	-0.083	.0146	-.0007	.0072	.0000	.0000
03.3	07.9	0.156	.0298	-.0051	-0.113	.0201	-.0013	.0076	.0000	.0000
					M = 1.40					
-04.4	-00.1	-0.200	.0350	.0246	0.000	-.0004	.0003	.0067	.0000	.0000
-02.1	-00.1	-0.101	.0247	.0180	0.000	-.0004	.0002	.0066	.0000	.0000
00.0	-00.1	-0.002	.0214	.0081	0.001	-.0003	.0003	.0067	.0000	.0000
02.2	-00.1	0.096	.0244	-.0006	-0.001	.0000	.0003	.0067	.0000	.0000
04.5	-00.1	0.206	.0361	-.0099	-0.001	-.0001	.0002	.0066	.0000	.0000
08.9	-00.1	0.426	.0855	-.0290	-0.001	.0002	.0000	.0067	.0000	.0000
03.3	-04.2	0.152	.0292	-.0054	0.051	-.0090	.0013	.0069	.0000	.0000
03.3	-02.2	0.152	.0292	-.0052	0.025	-.0042	.0006	.0070	.0000	.0000
03.3	-00.1	0.150	.0290	-.0050	0.000	-.0002	.0003	.0069	.0000	.0000
03.3	01.8	0.147	.0290	-.0049	-0.026	.0037	.0000	.0068	.0000	.0000
03.3	03.8	0.147	.0289	-.0051	-0.052	.0085	-.0006	.0069	.0000	.0000
03.3	05.9	0.147	.0287	-.0056	-0.080	.0137	-.0012	.0070	.0000	.0000
03.3	07.9	0.144	.0280	-.0054	-0.109	.0188	-.0018	.0071	.0000	.0000
					M = 2.50					
-04.3	00.0	-0.121	.0258	.0078	-0.001	.0000	.0001	.0039	.0000	.0000
-02.2	00.0	-0.062	.0191	.0051	-0.001	.0000	.0001	.0039	.0000	.0000
-00.1	00.0	-0.001	.0166	.0013	-0.001	-.0001	.0001	.0039	.0000	.0000
01.9	00.0	0.063	.0190	-.0023	0.000	.0000	.0002	.0038	.0000	.0000
04.0	00.0	0.126	.0261	-.0058	0.000	-.0001	.0001	.0038	.0000	.0000
06.1	00.0	0.191	.0379	-.0092	0.000	-.0001	.0001	.0036	.0000	.0000
08.2	00.0	0.255	.0547	-.0122	0.000	.0000	.0001	.0035	.0000	.0000
03.0	-06.0	0.092	.0222	-.0042	0.060	-.0053	.0024	.0038	.0000	.0000
03.0	-04.0	0.093	.0221	-.0045	0.039	-.0037	.0015	.0039	.0000	.0000
03.0	-02.0	0.093	.0219	-.0042	0.019	-.0018	.0008	.0038	.0000	.0000
03.0	00.0	0.094	.0220	-.0042	0.000	-.0001	.0002	.0038	.0000	.0000
03.0	01.9	0.095	.0221	-.0045	-0.019	.0018	-.0006	.0038	.0000	.0000
03.0	04.0	0.095	.0222	-.0049	-0.040	.0038	-.0012	.0038	.0000	.0000
03.0	06.0	0.093	.0222	-.0050	-0.060	.0053	-.0020	.0039	.0000	.0000
03.0	08.0	0.091	.0222	-.0053	-0.082	.0065	-.0026	.0041	.0000	.0000

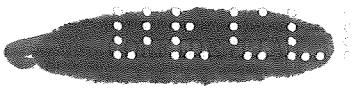
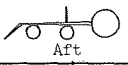


TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Continued

(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_I/m_\infty = 1.0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 3.00										
-06.3	00.1	-0.152	.0322	.0038	-0.001	-.0001	.0001	.0031	.0000	.0000
-04.2	00.1	-0.101	.0227	.0031	-0.001	-.0000	.0001	.0032	.0000	.0000
-02.2	00.1	-0.049	.0168	.0019	0.000	-.0001	.0001	.0032	.0000	.0000
-00.1	00.1	0.003	.0147	-.0002	0.000	-.0001	.0001	.0032	.0000	.0000
01.9	00.1	0.056	.0171	-.0018	0.000	-.0001	.0001	.0032	.0000	.0000
04.0	00.1	0.109	.0233	-.0030	0.000	-.0001	.0001	.0031	.0000	.0000
06.1	00.1	0.164	.0336	-.0048	0.000	-.0001	.0001	.0031	.0000	.0000
08.1	00.1	0.220	.0482	-.0073	0.000	-.0001	.0001	.0030	.0000	.0000
02.8	-06.0	0.081	.0200	-.0029	0.058	-.0031	.0024	.0031	.0000	.0000
02.8	-04.0	0.081	.0198	-.0028	0.036	-.0021	.0016	.0032	.0000	.0000
02.9	-01.9	0.081	.0196	-.0025	0.018	-.0012	.0008	.0032	.0000	.0000
02.9	00.1	0.082	.0197	-.0023	0.000	-.0001	.0001	.0032	.0000	.0000
03.0	02.1	0.082	.0199	-.0025	-0.019	.0011	-.0007	.0032	.0000	.0000
03.0	04.2	0.082	.0202	-.0028	-0.038	.0021	-.0014	.0032	.0000	.0000
03.1	06.3	0.081	.0204	-.0031	-0.058	.0031	-.0021	.0032	.0000	.0000
03.1	08.3	0.080	.0208	-.0032	-0.080	.0039	-.0026	.0033	.0000	.0000
04.9	-06.0	0.135	.0278	-.0049	0.059	-.0025	.0022	.0032	.0000	.0000
04.9	-04.0	0.135	.0276	-.0045	0.038	-.0019	.0015	.0032	.0000	.0000
05.0	-01.9	0.135	.0277	-.0039	0.019	-.0011	.0008	.0031	.0000	.0000
05.0	00.1	0.137	.0280	-.0039	0.000	-.0001	.0001	.0031	.0000	.0000
05.1	02.1	0.137	.0283	-.0040	-0.020	.0011	-.0007	.0031	.0000	.0000
05.1	04.2	0.137	.0285	-.0044	-0.039	.0019	-.0013	.0032	.0000	.0000
05.2	06.3	0.136	.0287	-.0049	-0.059	.0024	-.0020	.0033	.0000	.0000
05.2	08.4	0.134	.0290	-.0050	-0.081	.0026	-.0028	.0033	.0000	.0000
M = 3.50										
-04.2	00.0	-0.087	.0200	.0007	-0.001	.0001	.0002	.0025	.0000	.0000
-02.1	00.0	-0.043	.0150	.0005	-0.002	.0001	.0001	.0025	.0000	.0000
-00.1	00.0	0.002	.0133	-.0004	-0.002	.0001	.0001	.0025	.0000	.0000
01.9	00.0	0.048	.0152	-.0016	-0.001	.0001	.0001	.0025	.0000	.0000
03.9	00.0	0.095	.0208	-.0024	-0.001	.0001	.0000	.0025	.0000	.0000
08.1	00.0	0.189	.0424	-.0034	-0.001	.0001	.0000	.0024	.0000	.0000
02.5	-06.4	0.070	.0178	-.0020	0.054	-.0014	.0026	.0025	.0000	.0000
02.6	-04.2	0.071	.0175	-.0020	0.035	-.0012	.0018	.0025	.0000	.0000
02.8	-02.1	0.071	.0173	-.0018	0.017	-.0006	.0009	.0025	.0000	.0000
02.9	00.0	0.072	.0175	-.0019	-0.001	.0001	.0001	.0025	.0000	.0000
03.1	02.1	0.072	.0179	-.0020	-0.019	.0008	-.0008	.0025	.0000	.0000
03.2	04.3	0.072	.0182	-.0021	-0.037	.0013	-.0017	.0025	.0000	.0000
03.3	06.4	0.070	.0186	-.0021	-0.057	.0014	-.0023	.0025	.0000	.0000
03.5	08.6	0.069	.0191	-.0016	-0.077	.0008	-.0027	.0025	.0000	.0000

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Continued

(b) Mass-flow configuration N_{1C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.2	00.0	-0.192	.0325	.0014	-0.001	-.0002	.0002	.0019	.0002	.0000
-02.1	00.0	-0.100	.0231	.0070	-0.001	-.0002	.0002	.0019	.0002	.0000
00.0	00.0	-0.014	.0201	.0098	-0.001	.0000	.0002	.0019	.0002	.0000
02.1	00.0	0.080	.0222	.0148	-0.002	.0002	.0001	.0022	.0003	.0000
04.3	00.0	0.177	.0314	.0209	-0.001	.0000	.0001	.0022	.0003	.0000
08.6	00.0	0.378	.0733	.0399	0.000	.0004	-.0005	.0024	.0003	.0000
03.2	-04.1	0.131	.0253	.0165	0.050	-.0086	.0003	.0027	.0003	.0000
03.2	-02.0	0.130	.0257	.0176	0.023	-.0040	.0001	.0024	.0003	.0000
03.2	00.0	0.127	.0257	.0177	-0.001	-.0000	.0001	.0023	.0003	.0000
03.2	01.9	0.124	.0257	.0169	-0.026	.0039	.0003	.0022	.0002	.0000
03.2	03.9	0.126	.0254	.0154	-0.053	.0086	.0002	.0025	.0002	.0000
03.2	06.0	0.127	.0249	.0134	-0.082	.0140	.0001	.0027	.0003	.0000
					M = 0.85					
-04.3	00.0	-0.208	.0341	.0049	-0.001	.0001	.0006	.0021	.0002	.0000
-02.1	00.0	-0.108	.0238	.0094	-0.001	.0000	.0003	.0019	.0002	.0000
00.0	00.0	-0.014	.0205	.0107	-0.001	.0001	.0002	.0019	.0002	.0000
02.2	00.0	0.089	.0233	.0140	-0.002	.0003	.0002	.0018	.0002	.0000
04.4	00.0	0.196	.0336	.0189	-0.001	.0002	.0001	.0022	.0003	.0000
08.9	00.0	0.418	.0823	.0360	0.000	.0005	-.0006	.0024	.0003	.0000
03.3	-04.1	0.146	.0270	.0148	0.053	-.0095	-.0001	.0024	.0003	.0000
03.3	00.0	0.141	.0270	.0163	-0.002	.0001	.0002	.0022	.0003	.0000
03.2	01.9	0.138	.0270	.0156	-0.028	.0043	.0006	.0022	.0002	.0000
03.3	03.9	0.140	.0270	.0135	-0.056	.0095	.0007	.0023	.0002	.0000
03.3	06.0	0.142	.0265	.0113	-0.087	.0154	.0008	.0027	.0003	.0000
					M = 0.95					
-04.4	00.0	-0.223	.0398	.0093	-0.004	.0013	.0008	.0010	.0001	.0000
-02.1	00.0	-0.108	.0270	.0044	-0.001	.0001	.0005	.0010	.0001	.0000
00.0	00.0	-0.014	.0243	.0063	-0.002	.0004	.0005	.0007	.0001	.0000
02.2	00.0	0.104	.0266	.0045	-0.002	.0003	.0005	.0008	.0001	.0000
04.4	00.0	0.219	.0377	.0081	-0.001	.0001	.0002	.0012	.0002	.0000
09.0	00.0	0.480	.0959	.0122	0.001	.0000	-.0008	.0018	.0003	.0000
					M = 1.00					
-04.4	00.0	-0.259	.0508	.0389	-0.002	.0000	-.0014	.0056	.0010	.0000
-02.1	00.0	-0.146	.0359	.0324	-0.003	.0008	.0000	.0058	.0011	.0000
00.0	00.0	-0.036	.0314	.0234	-0.003	.0005	.0009	.0056	.0010	.0000
02.2	00.0	0.087	.0328	.0151	-0.003	.0001	.0008	.0056	.0010	.0000
04.5	00.0	0.221	.0452	.0039	-0.002	-.0001	.0004	.0056	.0011	.0000
09.0	00.0	0.499	.1046	-.0145	-0.001	.0003	-.0004	.0064	.0013	.0000
03.3	-04.1	0.153	.0368	.0095	0.057	-.0119	.0004	.0051	.0008	.0000
03.3	-02.0	0.155	.0371	.0095	0.027	-.0055	.0004	.0051	.0009	.0000
03.3	00.0	0.152	.0378	.0100	-0.002	-.0002	.0006	.0049	.0010	.0000
03.3	01.9	0.147	.0363	.0105	-0.031	.0051	.0008	.0051	.0011	.0000
03.3	03.9	0.146	.0366	.0104	-0.062	.0116	.0007	.0055	.0012	.0000
03.3	06.0	0.143	.0373	.0104	-0.094	.0187	.0003	.0054	.0012	.0000
					M = 1.25					
-04.4	00.0	-0.216	.0444	.0356	0.003	-.0019	-.0021	.0078	.0012	.0000
-02.1	00.0	-0.111	.0327	.0284	0.002	-.0013	-.0024	.0077	.0012	.0000
00.0	00.0	-0.008	.0287	.0178	0.001	-.0008	-.0020	.0075	.0011	.0000
02.3	00.0	0.104	.0318	.0076	0.000	-.0002	-.0013	.0077	.0012	.0000
04.5	00.0	0.220	.0441	-.0022	0.000	.0001	-.0006	.0075	.0011	.0000
09.0	00.0	0.453	.0971	-.0187	-0.001	.0004	.0000	.0074	.0010	.0000
03.4	-04.1	0.158	.0368	.0047	0.051	-.0090	.0006	.0077	.0010	.0000
03.4	-02.1	0.160	.0369	.0037	0.024	-.0040	-.0004	.0077	.0010	.0000
03.4	00.0	0.160	.0367	.0029	0.000	-.0001	-.0009	.0076	.0011	.0000
03.4	01.9	0.158	.0368	.0019	-0.025	.0037	-.0013	.0075	.0011	.0000
03.4	03.9	0.160	.0366	.0001	-0.052	.0087	-.0021	.0078	.0011	.0000
03.4	06.0	0.159	.0362	-.0011	-0.080	.0139	-.0028	.0080	.0012	.0000

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Continued

(b) Mass-flow configuration N_{1C}; $m_I/m_\infty = 0$, $m_O/m_\infty = 1.0$ - Concluded  Aft

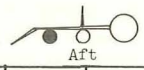
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.40										
-04.3	00.0	-0.191	.0409	.0281	0.003	-.0022	-.0004	.0073	.0009	.0000
-02.1	00.0	-0.094	.0312	.0218	0.003	-.0022	-.0011	.0072	.0009	.0000
00.0	00.0	0.003	.0281	.0119	0.003	-.0019	-.0016	.0072	.0009	.0000
02.2	00.0	0.103	.0314	.0025	0.002	-.0014	-.0018	.0072	.0009	.0000
04.5	00.0	0.212	.0432	-.0064	0.003	-.0011	-.0020	.0072	.0009	.0000
09.0	00.0	0.425	.0924	-.0232	0.002	-.0007	-.0017	.0071	.0008	.0000
03.4	-04.1	0.157	.0362	-.0009	0.052	-.0099	-.0001	.0076	.0008	.0000
03.4	-02.0	0.160	.0365	-.0016	0.027	-.0052	-.0013	.0075	.0008	.0000
03.4	00.0	0.156	.0360	-.0019	0.002	-.0013	-.0019	.0074	.0008	.0000
03.4	01.9	0.154	.0359	-.0021	-0.023	.0026	-.0022	.0073	.0009	.0000
03.4	03.9	0.152	.0355	-.0026	-0.050	.0074	-.0028	.0074	.0009	.0000
03.3	06.0	0.150	.0353	-.0031	-0.078	.0125	-.0034	.0075	.0010	.0000
M = 2.50										
-04.3	00.0	-0.108	.0306	.0076	0.001	-.0011	.0018	.0038	.0005	.0000
-02.2	00.0	-0.048	.0255	.0046	0.000	-.0012	.0018	.0038	.0005	.0000
-00.1	00.0	0.014	.0251	.0009	0.001	-.0017	.0018	.0038	.0005	.0000
01.9	00.0	0.076	.0284	-.0023	0.002	-.0019	.0015	.0037	.0005	.0000
04.0	00.0	0.138	.0360	-.0050	0.002	-.0021	.0011	.0037	.0005	.0000
08.2	00.0	0.263	.0665	-.0105	0.004	-.0027	-.0001	.0036	.0005	.0000
03.0	-06.0	0.109	.0332	-.0051	0.060	-.0071	.0043	.0039	.0005	.0000
03.0	-04.0	0.109	.0326	-.0052	0.039	-.0055	.0032	.0039	.0005	.0000
03.0	-02.0	0.107	.0320	-.0044	0.020	-.0036	.0023	.0038	.0005	.0000
03.0	00.0	0.107	.0315	-.0037	0.001	-.0020	.0013	.0038	.0005	.0000
03.0	02.0	0.106	.0313	-.0034	-0.017	.0001	.0002	.0038	.0005	.0000
03.0	04.0	0.103	.0310	-.0032	-0.037	.0022	-.0008	.0038	.0005	.0000
03.0	06.0	0.100	.0308	-.0033	-0.057	.0039	-.0017	.0039	.0005	.0000
03.0	08.0	0.098	.0308	-.0032	-0.079	.0053	-.0025	.0040	.0005	.0000
M = 3.00										
-04.2	00.1	-0.088	.0279	.0031	0.001	-.0013	.0016	.0030	.0003	.0000
-02.1	00.1	-0.036	.0237	.0015	0.000	-.0014	.0018	.0030	.0003	.0000
-00.1	00.1	0.019	.0240	-.0007	0.001	-.0015	.0021	.0030	.0003	.0000
01.9	00.1	0.071	.0276	-.0024	0.000	-.0015	.0021	.0030	.0003	.0000
04.0	00.1	0.124	.0346	-.0033	0.000	-.0016	.0019	.0030	.0003	.0000
08.2	00.1	0.230	.0601	-.0063	0.002	-.0022	.0012	.0030	.0003	.0000
02.8	-06.0	0.099	.0319	-.0040	0.058	-.0051	.0047	.0031	.0003	.0000
02.9	-04.0	0.098	.0313	-.0037	0.037	-.0038	.0039	.0031	.0003	.0000
02.9	-01.9	0.098	.0309	-.0034	0.018	-.0027	.0031	.0030	.0003	.0000
03.0	00.1	0.098	.0307	-.0030	0.000	-.0015	.0021	.0030	.0003	.0000
03.0	02.1	0.096	.0305	-.0026	-0.018	-.0003	.0010	.0030	.0003	.0000
03.1	04.2	0.095	.0302	-.0020	-0.035	.0008	.0000	.0030	.0003	.0000
03.1	06.3	0.091	.0302	-.0018	-0.055	.0018	-.0012	.0031	.0003	.0000
03.1	08.4	0.088	.0302	-.0017	-0.076	.0022	-.0023	.0033	.0003	.0000
05.2	08.4	0.140	.0390	-.0031	-0.076	.0006	-.0029	.0033	.0003	.0000
M = 3.50										
-04.2	00.0	-0.074	.0268	-.0007	0.000	-.0011	.0019	.0024	-.0003	.0000
-02.1	00.0	-0.028	.0231	-.0013	-0.001	-.0011	.0022	.0025	-.0003	.0000
-00.1	00.0	0.020	.0236	-.0029	-0.001	-.0013	.0028	.0025	-.0002	.0000
01.9	00.0	0.066	.0273	-.0037	-0.002	-.0012	.0031	.0024	-.0002	.0000
04.0	00.0	0.112	.0342	-.0040	-0.002	-.0012	.0031	.0024	-.0002	.0000
08.1	00.0	0.202	.0574	-.0039	0.000	-.0019	.0024	.0024	-.0001	.0000
02.5	-06.4	0.089	.0312	-.0030	0.056	-.0039	.0052	.0024	-.0001	.0000
02.6	-04.2	0.089	.0302	-.0030	0.035	-.0031	.0043	.0024	-.0001	.0000
02.8	-02.1	0.088	.0300	-.0029	0.017	-.0022	.0035	.0024	-.0001	.0000
02.9	00.0	0.088	.0296	-.0028	-0.001	-.0013	.0026	.0024	-.0001	.0000
03.1	02.1	0.087	.0295	-.0027	-0.019	-.0005	.0016	.0024	-.0001	.0000
03.2	04.3	0.085	.0295	-.0024	-0.036	.0002	.0005	.0024	-.0001	.0000
03.3	06.4	0.083	.0294	-.0020	-0.055	.0004	-.0006	.0024	.0000	.0000
03.5	08.6	0.080	.0296	-.0014	-0.074	-.0004	-.0015	.0025	.0000	.0000

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Continued

(c) Mass-flow configuration N_{1E}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 0$

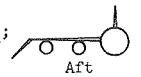
α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
					M = 0.65					
-04.3	-00.1	-0.192	.0320	-.0007	-0.001	-.0010	.0004	.0020	.0000	.0006
-02.1	-00.1	-0.101	.0226	.0045	-0.001	-.0008	.0003	.0020	.0000	.0005
00.0	-00.1	-0.015	.0193	.0073	-0.001	-.0006	.0003	.0021	.0000	.0005
02.1	-00.1	0.076	.0216	.0124	-0.002	-.0004	-.0001	.0021	.0000	.0004
04.3	-00.1	0.173	.0310	.0192	-0.001	-.0006	-.0005	.0021	.0000	.0004
08.6	-00.1	0.376	.0738	.0374	-0.000	-.0006	-.0009	.0023	.0000	.0007
03.2	-04.1	0.128	.0249	.0139	0.050	-.0091	-.0001	.0025	.0000	.0005
03.2	-02.1	0.126	.0250	.0154	0.023	-.0045	-.0003	.0025	.0000	.0005
03.2	-00.1	0.123	.0253	.0156	-0.002	-.0006	-.0003	.0023	.0000	.0004
03.2	01.9	0.120	.0251	.0151	-0.026	.0032	-.0002	.0024	.0000	.0004
03.2	03.9	0.122	.0251	.0141	-0.053	.0079	-.0004	.0024	.0000	.0004
03.2	05.9	0.122	.0243	.0124	-0.082	.0133	-.0006	.0029	.0000	.0005
03.2	07.9	0.122	.0237	.0110	-0.112	.0186	-.0006	.0029	.0000	.0005
					M = 0.85					
-04.3	00.0	-0.209	.0338	.0030	-0.002	-.0009	.0003	.0023	.0000	.0006
-02.1	00.0	-0.109	.0235	.0066	-0.002	-.0007	.0005	.0019	.0000	.0005
00.0	00.0	-0.015	.0196	.0079	-0.001	-.0005	.0004	.0020	.0000	.0004
02.2	00.0	0.085	.0225	.0116	-0.002	-.0003	-.0000	.0020	.0000	.0004
04.4	00.0	0.189	.0330	.0169	-0.001	-.0005	-.0006	.0022	.0000	.0004
08.8	00.0	0.412	.0819	.0331	0.001	-.0005	-.0013	.0024	.0000	.0008
03.3	-04.1	0.142	.0262	.0119	0.052	-.0097	-.0005	.0024	.0000	.0005
03.3	-02.1	0.140	.0265	.0137	0.025	-.0046	-.0005	.0023	.0000	.0004
03.3	-00.1	0.136	.0266	.0143	-0.002	-.0005	-.0003	.0022	.0000	.0004
03.3	01.9	0.134	.0268	.0139	-0.028	.0036	-.0000	.0019	.0000	.0003
03.3	03.9	0.134	.0263	.0126	-0.056	.0086	-.0001	.0024	.0000	.0004
03.3	05.9	0.134	.0260	.0108	-0.086	.0144	-.0002	.0025	.0000	.0004
03.3	08.0	0.133	.0253	.0093	-0.116	.0202	-.0003	.0026	.0000	.0005
					M = 0.95					
-04.4	-00.1	-0.221	.0383	.0056	-0.003	-.0009	-.0005	.0012	.0000	.0004
-02.2	-00.1	-0.114	.0264	.0054	-0.000	-.0012	-.0001	.0011	.0000	.0003
00.0	-00.1	-0.012	.0229	.0038	-0.001	-.0007	.0003	.0009	.0000	.0003
02.2	00.0	0.099	.0252	.0048	-0.002	-.0006	.0000	.0011	.0000	.0002
04.4	00.0	0.215	.0371	.0071	0.000	-.0010	-.0009	.0011	.0000	.0003
09.0	00.0	0.473	.0954	.0102	0.003	-.0019	-.0014	.0017	.0000	.0008
					M = 1.00					
-04.4	00.0	-0.251	.0495	.0327	-0.002	-.0011	-.0008	.0052	.0000	.0012
-02.1	00.0	-0.139	.0356	.0273	-0.002	-.0008	-.0001	.0053	.0000	.0012
00.0	00.0	-0.029	.0303	.0185	-0.002	-.0009	.0001	.0053	.0000	.0012
02.2	00.0	0.091	.0337	.0097	-0.004	-.0004	.0002	.0052	.0000	.0011
04.4	00.0	0.219	.0457	.0008	-0.004	-.0003	.0003	.0055	.0000	.0011
09.0	00.0	0.498	.1053	-.0198	-0.002	-.0014	.0003	.0067	.0000	.0018
03.3	-04.1	0.151	.0366	.0040	0.055	-.0122	-.0001	.0056	.0000	.0011
03.3	-02.1	0.151	.0373	.0047	0.025	-.0060	.0001	.0054	.0000	.0011
03.3	-00.1	0.147	.0373	.0059	-0.004	-.0005	.0002	.0050	.0000	.0010
03.3	01.9	0.145	.0385	.0061	-0.032	.0047	.0005	.0050	.0000	.0011
03.3	03.9	0.147	.0377	.0064	-0.063	.0114	.0003	.0058	.0000	.0012
03.3	05.9	0.145	.0372	.0063	-0.096	.0187	-.0002	.0060	.0000	.0013
03.3	08.0	0.142	.0367	.0068	-0.129	.0259	-.0006	.0064	.0000	.0014
					M = 1.25					
-04.4	00.0	-0.220	.0440	.0309	0.000	-.0018	-.0007	.0075	.0000	.0009
-02.1	00.0	-0.115	.0323	.0234	0.000	-.0015	-.0009	.0074	.0000	.0008
00.0	00.0	-0.009	.0279	.0118	0.001	-.0012	-.0009	.0077	.0000	.0008
02.2	00.0	0.101	.0315	.0014	-0.001	-.0007	-.0011	.0073	.0000	.0008
04.5	00.0	0.218	.0435	-.0081	-0.002	-.0004	-.0009	.0074	.0000	.0011
09.0	00.0	0.453	.0973	-.0236	-0.000	-.0011	-.0012	.0071	.0000	.0016
03.4	-04.1	0.159	.0363	-.0025	0.050	-.0097	.0003	.0074	.0000	.0008
03.4	-02.1	0.161	.0365	-.0030	0.024	-.0047	-.0005	.0074	.0000	.0008
03.4	-00.1	0.160	.0366	-.0035	-0.002	-.0006	-.0010	.0072	.0000	.0009
03.3	01.9	0.156	.0360	-.0035	-0.026	.0033	-.0012	.0075	.0000	.0010
03.3	03.9	0.156	.0361	-.0040	-0.054	.0081	-.0018	.0075	.0000	.0012
03.3	05.9	0.154	.0358	-.0038	-0.082	.0135	-.0022	.0078	.0000	.0013
03.3	08.0	0.152	.0353	-.0039	-0.111	.0187	-.0028	.0080	.0000	.0013

TABLE VI.- AERODYNAMIC CHARACTERISTICS OF MODEL 4 ($F_2W_2C_1V_2N_1$) - Concluded

(c) Mass-flow configuration N_{1E}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 0$ - Concluded 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 1.40										
-04.3	-00.1	-0.197	.0410	.0256	0.002	-.0029	.0003	.0070	.0000	.0010
-02.1	-00.1	-0.100	.0309	.0189	0.003	-.0029	-.0001	.0069	.0000	.0009
00.0	-00.1	-0.005	.0275	.0095	0.002	-.0027	-.0004	.0069	.0000	.0009
02.2	-00.1	0.095	.0306	.0000	0.001	-.0022	-.0006	.0069	.0000	.0009
04.5	-00.1	0.203	.0422	-.0093	0.001	-.0018	-.0011	.0069	.0000	.0009
08.9	-00.1	0.421	.0914	-.0279	0.001	-.0018	-.0019	.0070	.0000	.0014
03.3	-04.1	0.149	.0349	-.0044	0.053	-.0110	-.0000	.0071	.0000	.0008
03.3	-02.1	0.150	.0352	-.0043	0.026	-.0061	-.0006	.0070	.0000	.0009
03.3	-00.1	0.148	.0351	-.0044	0.001	-.0020	-.0010	.0070	.0000	.0009
03.3	01.9	0.145	.0351	-.0044	-0.024	.0019	-.0012	.0071	.0000	.0009
03.3	04.0	0.145	.0351	-.0049	-0.050	.0065	-.0018	.0071	.0000	.0010
03.3	06.0	0.145	.0350	-.0053	-0.078	.0118	-.0024	.0072	.0000	.0011
03.3	07.6	0.142	.0343	-.0053	-0.101	.0159	-.0029	.0075	.0000	.0012
M = 2.50										
-04.2	00.0	-0.115	.0326	.0059	0.004	-.0032	.0016	.0039	.0000	.0007
-02.2	00.0	-0.056	.0264	.0035	0.004	-.0033	.0014	.0039	.0000	.0006
-00.1	00.0	0.004	.0241	.0002	0.005	-.0034	.0010	.0038	.0000	.0006
01.9	00.0	0.065	.0266	-.0030	0.006	-.0034	.0005	.0037	.0000	.0006
04.0	00.0	0.128	.0335	-.0061	0.006	-.0034	.0001	.0037	.0000	.0006
08.2	00.0	0.252	.0616	-.0117	0.007	-.0032	-.0012	.0035	.0000	.0006
02.9	-06.0	0.095	.0302	-.0050	0.063	-.0081	.0026	.0039	.0000	.0006
03.0	-04.0	0.096	.0298	-.0054	0.043	-.0068	.0017	.0039	.0000	.0006
03.0	-02.0	0.095	.0294	-.0049	0.024	-.0051	.0010	.0038	.0000	.0006
03.0	00.0	0.096	.0294	-.0046	0.006	-.0034	.0003	.0037	.0000	.0006
03.0	02.0	0.096	.0294	-.0048	-0.013	-.0017	-.0005	.0037	.0000	.0006
03.0	04.0	0.095	.0293	-.0050	-0.033	.0002	-.0013	.0037	.0000	.0006
03.0	06.0	0.094	.0293	-.0055	-0.054	.0019	-.0020	.0038	.0000	.0006
02.9	08.0	0.092	.0294	-.0059	-0.076	.0032	-.0026	.0039	.0000	.0006
M = 3.00										
-04.2	00.1	-0.095	.0300	.0017	0.003	-.0029	.0015	.0030	.0000	.0005
-02.2	00.1	-0.044	.0243	.0006	0.004	-.0031	.0013	.0030	.0000	.0005
-00.1	00.1	0.007	.0225	-.0012	0.004	-.0033	.0010	.0030	.0000	.0005
01.9	00.1	0.058	.0249	-.0024	0.004	-.0033	.0007	.0030	.0000	.0004
04.0	00.1	0.111	.0311	-.0035	0.006	-.0033	.0004	.0030	.0000	.0004
08.1	00.1	0.218	.0554	-.0071	0.007	-.0036	-.0005	.0029	.0000	.0005
02.8	-06.0	0.084	.0284	-.0036	0.063	-.0070	.0028	.0031	.0000	.0004
02.8	-04.0	0.083	.0280	-.0034	0.042	-.0059	.0020	.0031	.0000	.0004
02.9	-01.9	0.083	.0276	-.0031	0.023	-.0046	.0013	.0031	.0000	.0004
02.9	00.1	0.084	.0275	-.0029	0.005	-.0033	.0005	.0031	.0000	.0004
03.0	02.1	0.084	.0274	-.0032	-0.013	-.0020	-.0003	.0031	.0000	.0004
03.0	04.2	0.083	.0275	-.0035	-0.033	-.0007	-.0012	.0031	.0000	.0004
03.1	06.3	0.082	.0277	-.0038	-0.053	.0004	-.0020	.0032	.0000	.0004
03.1	08.4	0.082	.0280	-.0040	-0.075	.0010	-.0028	.0033	.0000	.0004
05.2	08.4	0.133	.0358	-.0051	-0.075	-.0004	-.0037	.0033	.0000	.0004
M = 3.50										
-04.2	00.0	-0.081	.0276	-.0009	0.002	-.0025	.0016	.0025	.0000	.0004
-02.1	00.0	-0.038	.0228	-.0009	0.002	-.0026	.0014	.0025	.0000	.0004
-00.1	00.0	0.006	.0213	-.0016	0.003	-.0027	.0010	.0024	.0000	.0004
01.9	00.0	0.051	.0232	-.0023	0.003	-.0028	.0007	.0025	.0000	.0004
03.9	00.0	0.096	.0286	-.0028	0.004	-.0029	.0003	.0024	.0000	.0004
08.1	00.0	0.189	.0499	-.0036	0.006	-.0032	-.0003	.0024	.0000	.0004
02.5	-06.4	0.073	.0268	-.0025	0.061	-.0055	.0032	.0024	.0000	.0003
02.6	-04.2	0.073	.0262	-.0025	0.040	-.0049	.0024	.0024	.0000	.0003
02.8	-02.1	0.073	.0257	-.0022	0.021	-.0039	.0014	.0024	.0000	.0003
02.9	00.0	0.074	.0256	-.0024	0.004	-.0028	.0005	.0024	.0000	.0003
03.0	02.1	0.074	.0257	-.0028	-0.014	-.0019	-.0004	.0024	.0000	.0003
03.2	04.3	0.073	.0258	-.0031	-0.033	-.0011	-.0014	.0025	.0000	.0003
03.3	06.4	0.072	.0259	-.0032	-0.051	-.0011	-.0022	.0025	.0000	.0003
03.4	08.6	0.070	.0261	-.0025	-0.071	-.0018	-.0028	.0026	.0000	.0003

TABLE VII.- AERODYNAMIC CHARACTERISTICS OF MODEL 5 ($F_1W_2C_1V_1N_1$)

(a) Mass-flow configuration N_{1A}; $m_I/m_\infty = 1.0$, $m_O/m_\infty = 1.0$ 

α, deg	β, deg	C_L	C_D	C_m	C_Y	C_n	C_l	$C_{D_{b_F}}$	$C_{D_{b_I}}$	$C_{D_{b_O}}$
M = 2.50										
-04.3	00.0	-0.121	.0251	.0098	-0.001	.0001	.0002	.0036	.0000	.0000
-00.1	00.0	0.004	.0160	-.0009	0.000	.0000	.0002	.0036	.0000	.0000
01.9	00.0	0.069	.0187	-.0067	0.001	-.0001	.0002	.0036	.0000	.0000
04.0	00.0	0.135	.0263	-.0125	0.001	-.0001	.0002	.0036	.0000	.0000
08.2	00.0	0.267	.0561	-.0240	0.000	-.0001	.0002	.0037	.0000	.0000
02.9	-06.0	0.100	.0222	-.0095	0.051	-.0102	.0021	.0037	.0000	.0000
02.9	-04.0	0.101	.0220	-.0100	0.033	-.0069	.0013	.0037	.0000	.0000
02.9	-02.0	0.101	.0218	-.0098	0.016	-.0033	.0008	.0036	.0000	.0000
02.9	00.0	0.102	.0219	-.0097	0.000	-.0001	.0002	.0036	.0000	.0000
02.9	02.0	0.102	.0220	-.0100	-0.016	.0033	-.0004	.0036	.0000	.0000
02.9	04.0	0.102	.0222	-.0102	-0.033	.0068	-.0009	.0036	.0000	.0000
02.9	06.0	0.101	.0223	-.0102	-0.051	.0100	-.0015	.0036	.0000	.0000
02.9	08.0	0.099	.0222	-.0102	-0.072	.0133	-.0019	.0037	.0000	.0000
M = 3.00										
-04.2	00.1	-0.101	.0221	.0051	0.000	.0000	.0002	.0029	.0000	.0000
-00.1	00.1	0.005	.0142	-.0016	0.000	-.0001	.0002	.0030	.0000	.0000
01.9	00.1	0.060	.0168	-.0053	0.001	-.0002	.0001	.0029	.0000	.0000
04.0	00.1	0.116	.0236	-.0087	0.001	-.0002	.0002	.0029	.0000	.0000
08.1	00.1	0.230	.0499	-.0177	0.001	-.0003	.0002	.0029	.0000	.0000
02.8	-06.0	0.087	.0199	-.0076	0.049	-.0064	.0019	.0031	.0000	.0000
02.8	-04.0	0.087	.0197	-.0073	0.031	-.0043	.0013	.0031	.0000	.0000
02.9	-01.9	0.087	.0195	-.0069	0.016	-.0023	.0007	.0031	.0000	.0000
02.9	00.1	0.088	.0196	-.0069	0.001	-.0002	.0001	.0030	.0000	.0000
03.0	02.1	0.088	.0200	-.0071	-0.015	.0020	-.0005	.0029	.0000	.0000
03.0	04.2	0.088	.0203	-.0073	-0.031	.0042	-.0010	.0029	.0000	.0000
03.1	06.3	0.086	.0204	-.0077	-0.048	.0063	-.0015	.0031	.0000	.0000
03.1	08.3	0.086	.0209	-.0076	-0.070	.0089	-.0019	.0031	.0000	.0000
04.8	-06.0	0.144	.0283	-.0123	0.050	-.0046	.0017	.0032	.0000	.0000
04.9	-04.0	0.143	.0281	-.0115	0.032	-.0031	.0012	.0032	.0000	.0000
04.9	-01.9	0.143	.0282	-.0108	0.016	-.0018	.0007	.0031	.0000	.0000
05.0	00.1	0.144	.0284	-.0107	0.000	-.0002	.0002	.0031	.0000	.0000
05.0	02.1	0.145	.0287	-.0109	-0.015	.0014	-.0004	.0030	.0000	.0000
05.1	04.2	0.144	.0291	-.0115	-0.031	.0029	-.0010	.0030	.0000	.0000
05.1	06.2	0.144	.0292	-.0122	-0.049	.0045	-.0013	.0031	.0000	.0000
05.2	08.3	0.143	.0295	-.0120	-0.072	.0071	-.0019	.0032	.0000	.0000
M = 3.50										
-04.2	00.0	-0.088	.0195	.0028	-0.002	.0003	.0002	.0023	.0000	.0000
-00.1	00.0	0.004	.0127	-.0018	-0.001	.0002	.0001	.0023	.0000	.0000
01.9	00.0	0.052	.0150	-.0045	-0.001	.0001	.0001	.0023	.0000	.0000
03.9	00.0	0.100	.0212	-.0070	0.000	.0001	.0001	.0022	.0000	.0000
08.0	00.0	0.198	.0439	-.0126	0.000	.0001	.0001	.0023	.0000	.0000
02.5	-06.4	0.075	.0177	-.0061	0.047	-.0043	.0022	.0023	.0000	.0000
02.6	-04.2	0.075	.0175	-.0060	0.030	-.0033	.0016	.0024	.0000	.0000
02.8	-02.1	0.075	.0173	-.0057	0.015	-.0017	.0009	.0024	.0000	.0000
02.9	00.0	0.077	.0174	-.0057	0.000	.0002	.0001	.0024	.0000	.0000
03.0	02.1	0.076	.0178	-.0058	-0.017	.0019	-.0006	.0024	.0000	.0000
03.2	04.3	0.076	.0183	-.0061	-0.032	.0035	-.0013	.0023	.0000	.0000
03.3	06.4	0.075	.0186	-.0062	-0.048	.0043	-.0017	.0023	.0000	.0000
03.4	08.6	0.073	.0191	-.0053	-0.069	.0058	-.0019	.0024	.0000	.0000

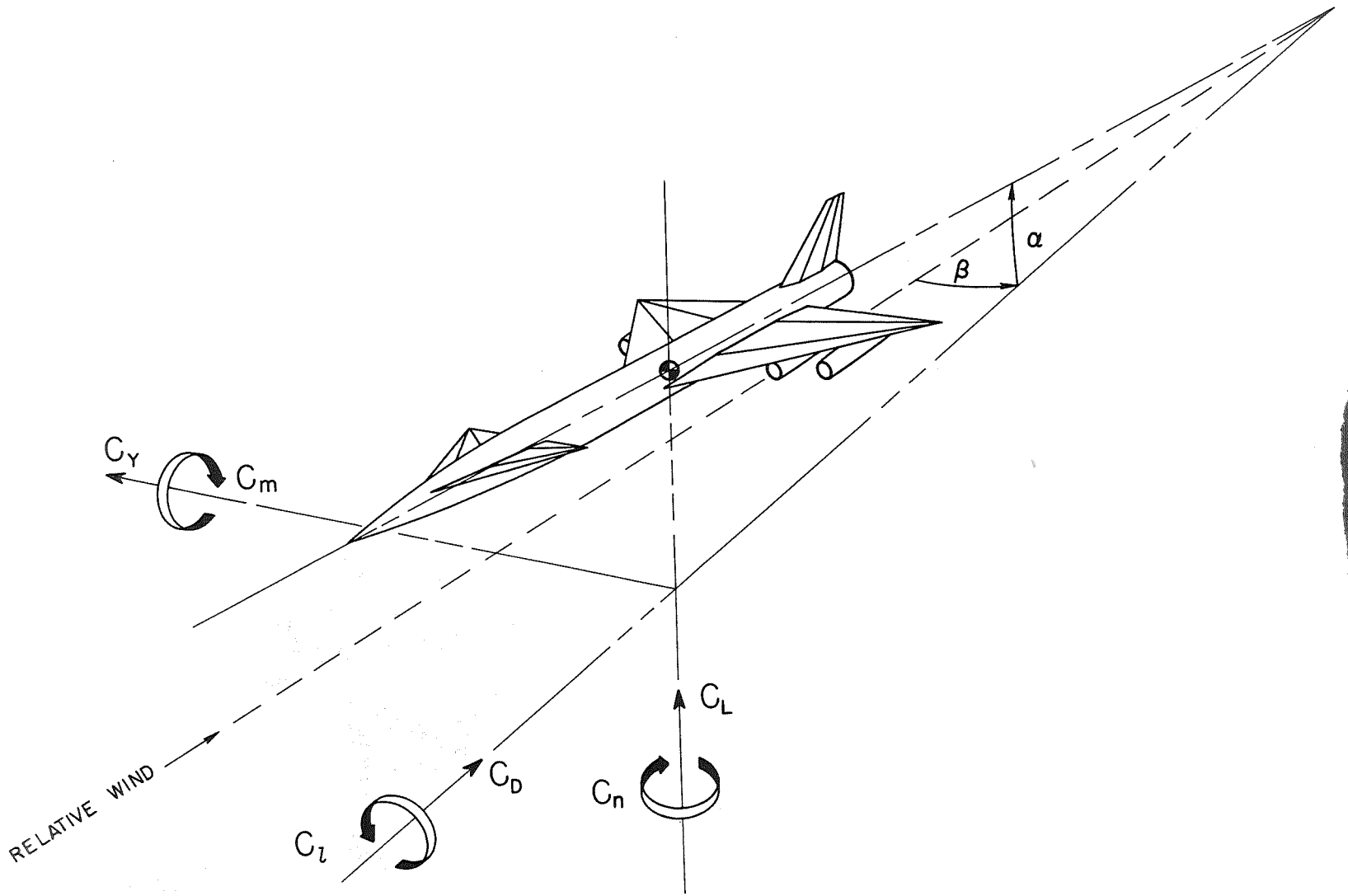
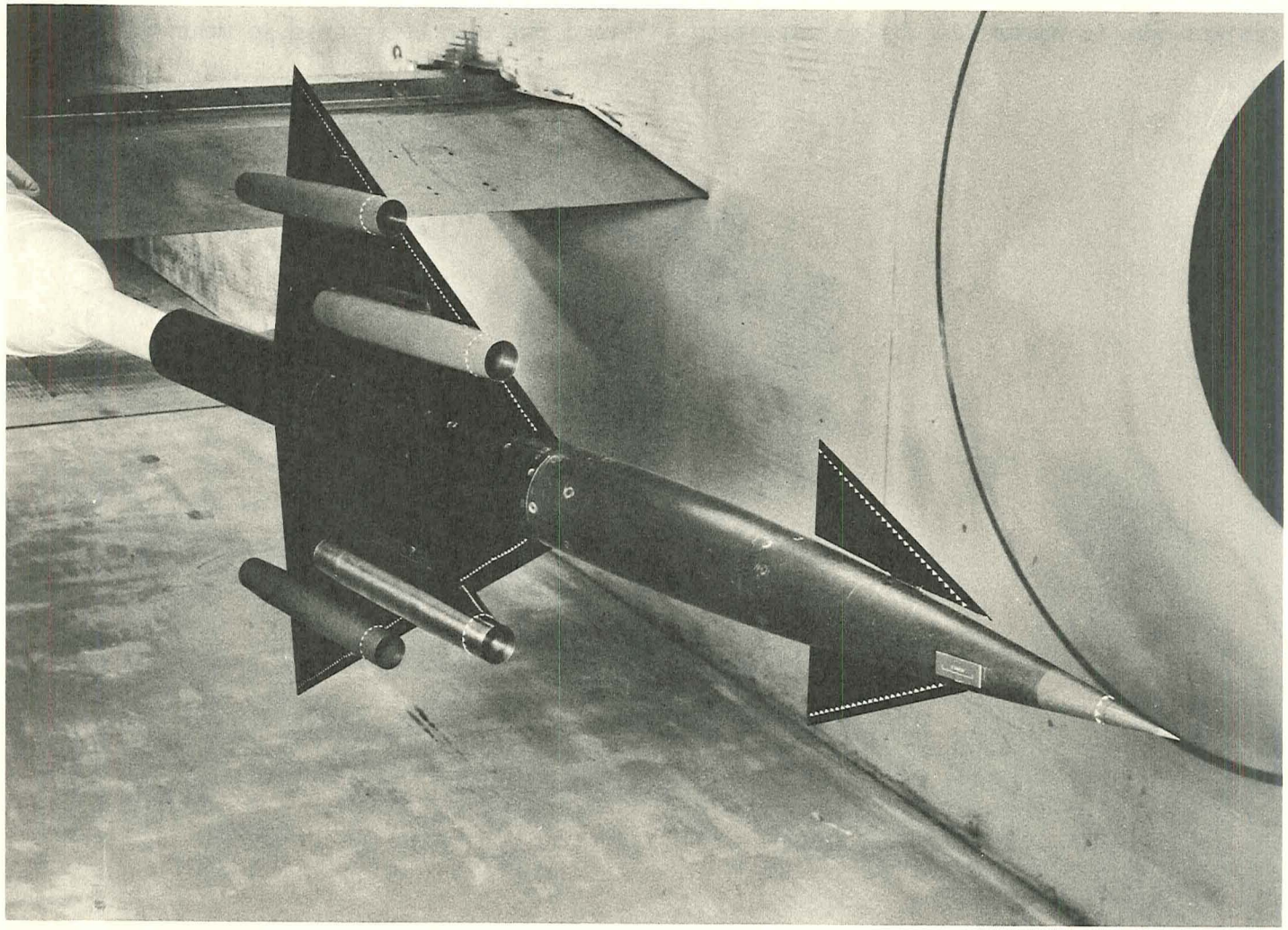


Figure 1.- System of stability axes and positive direction of forces, moments, and angles.



(a) Three-quarter bottom view of model 3. A-27742

Figure 2.- Model photographs.

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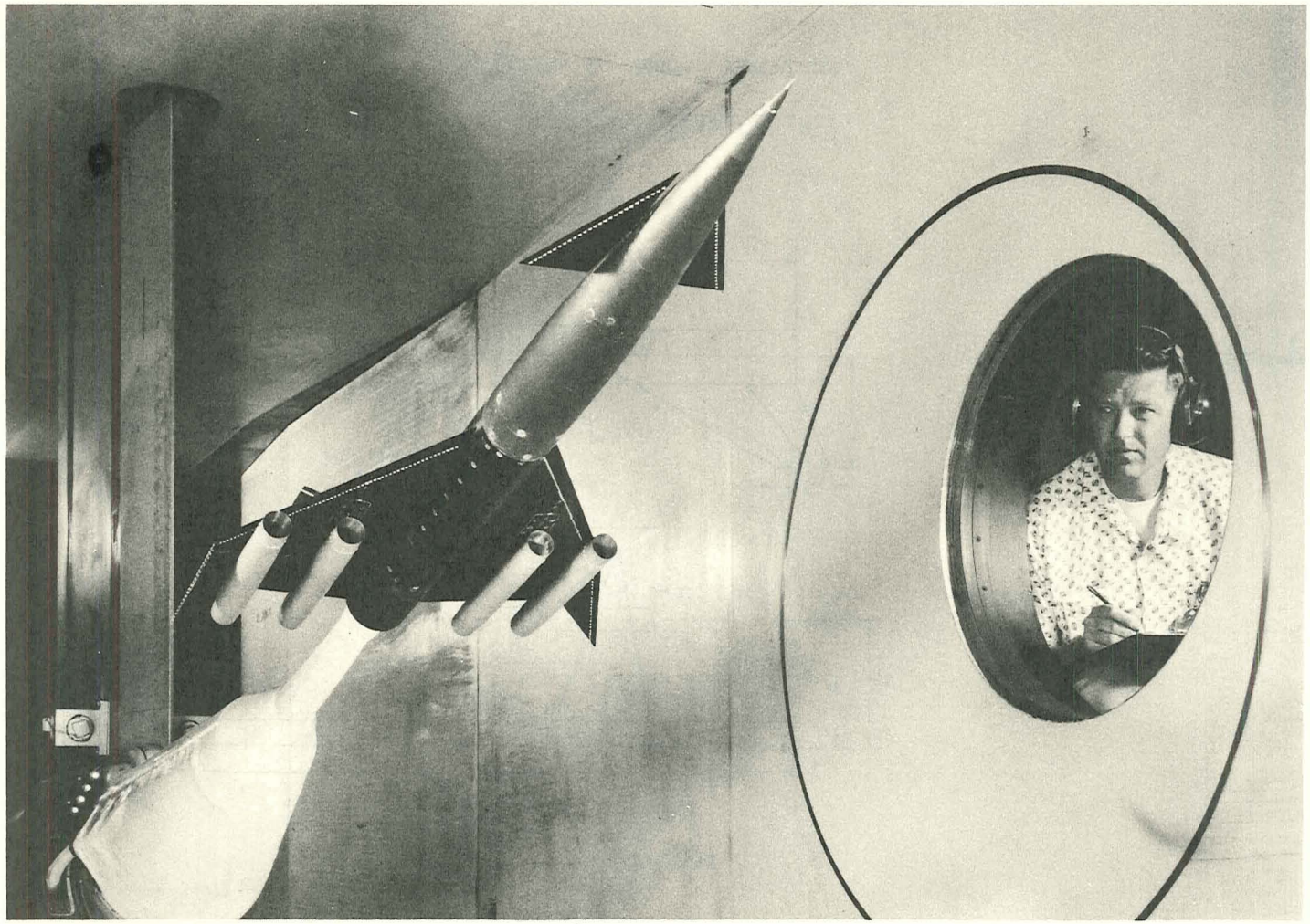
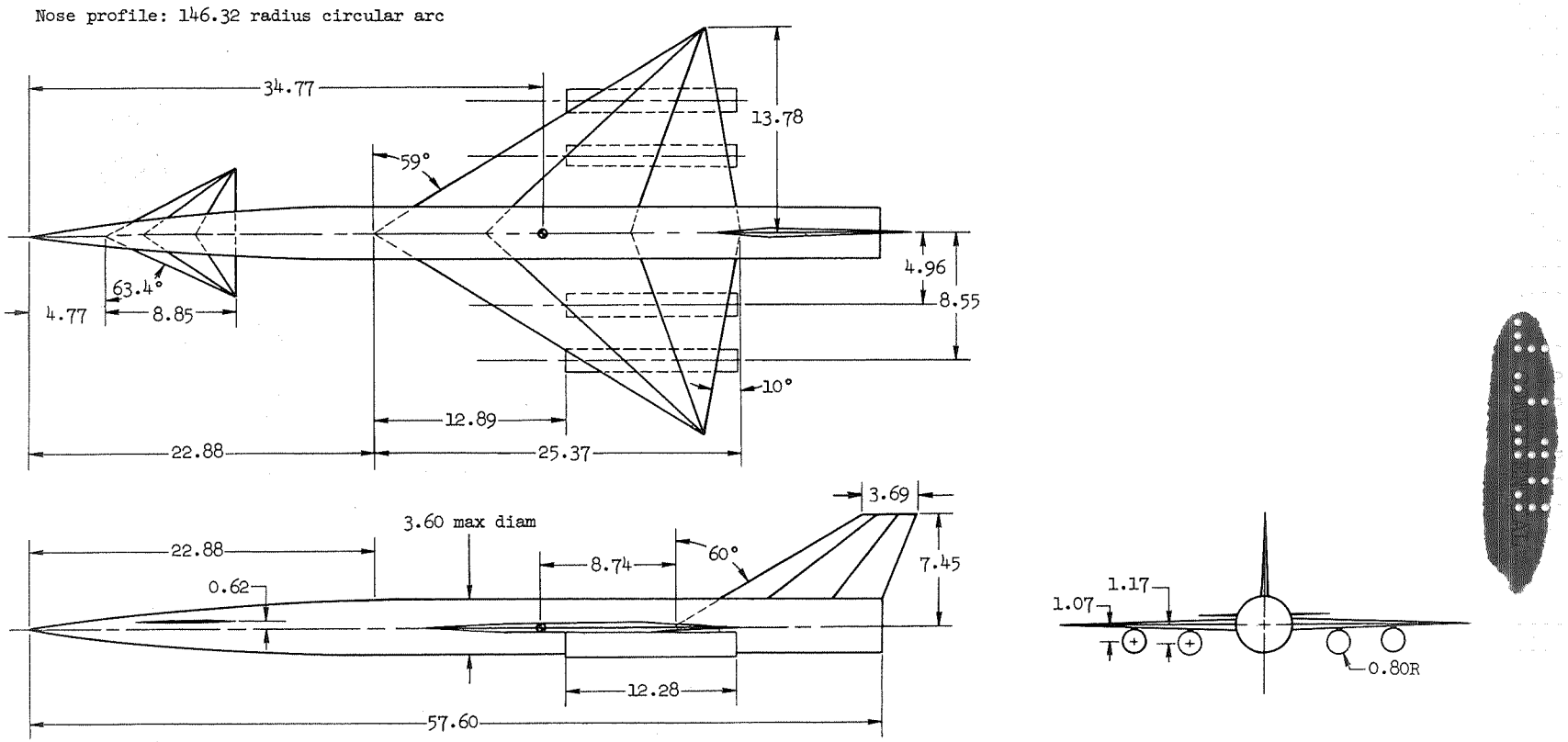


(b) Three-quarter bottom view of model 4. A-27758

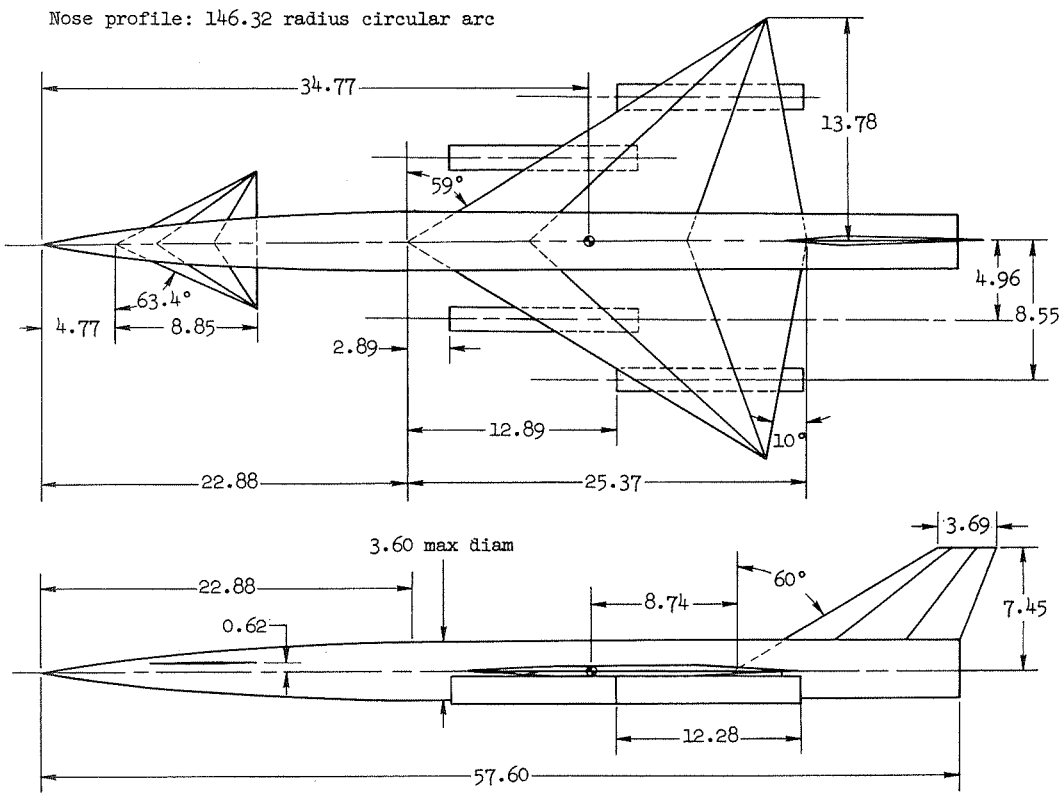
Figure 2.- Concluded.



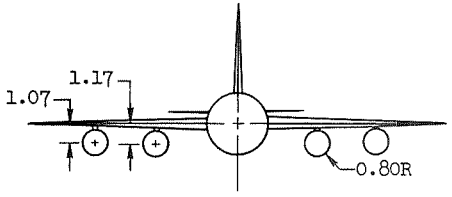
Note: All dimensions in inches
except as noted

(a) Model 1 - $(F_1W_1C_1V_1N_1)$.

Figure 3.- Model drawings.

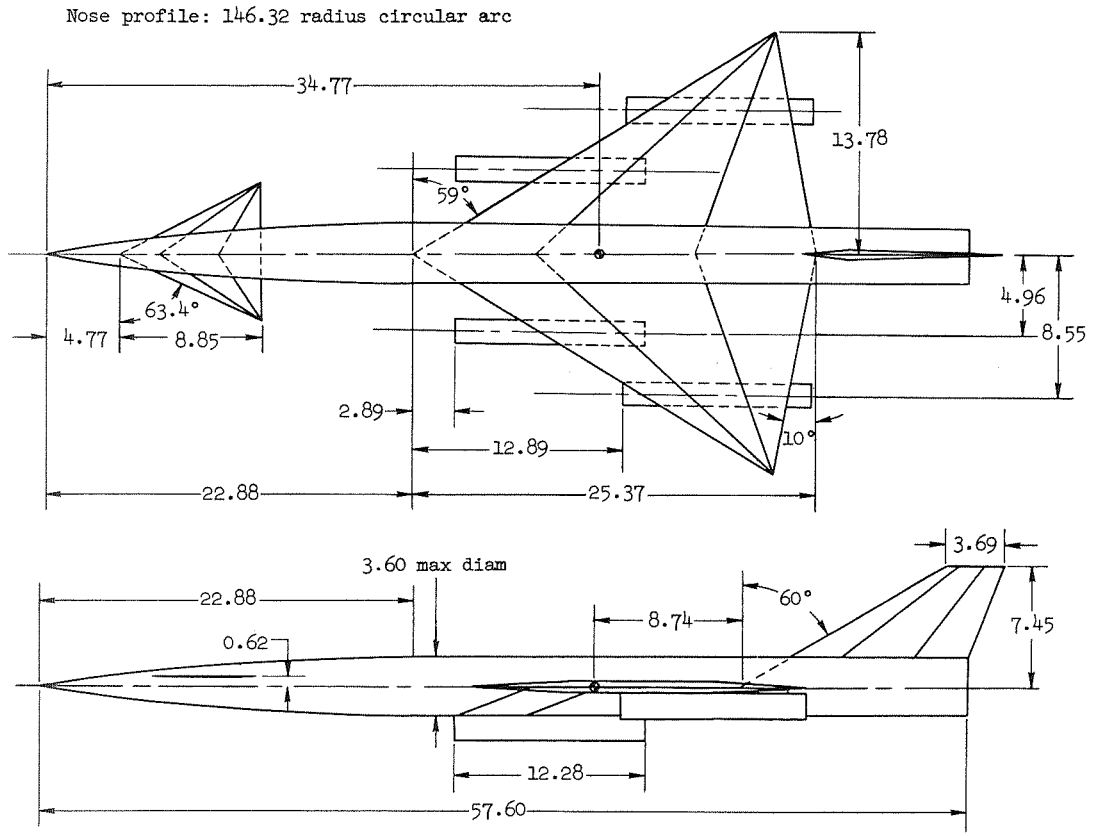


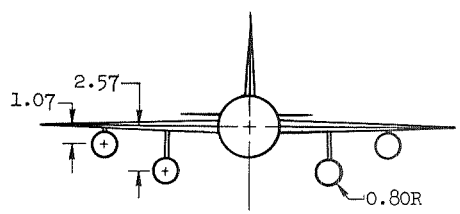
Note: All dimensions in inches
except as noted



(b) Model 2 - ($F_1W_1C_1V_1N_2$).

Figure 3.- Continued.

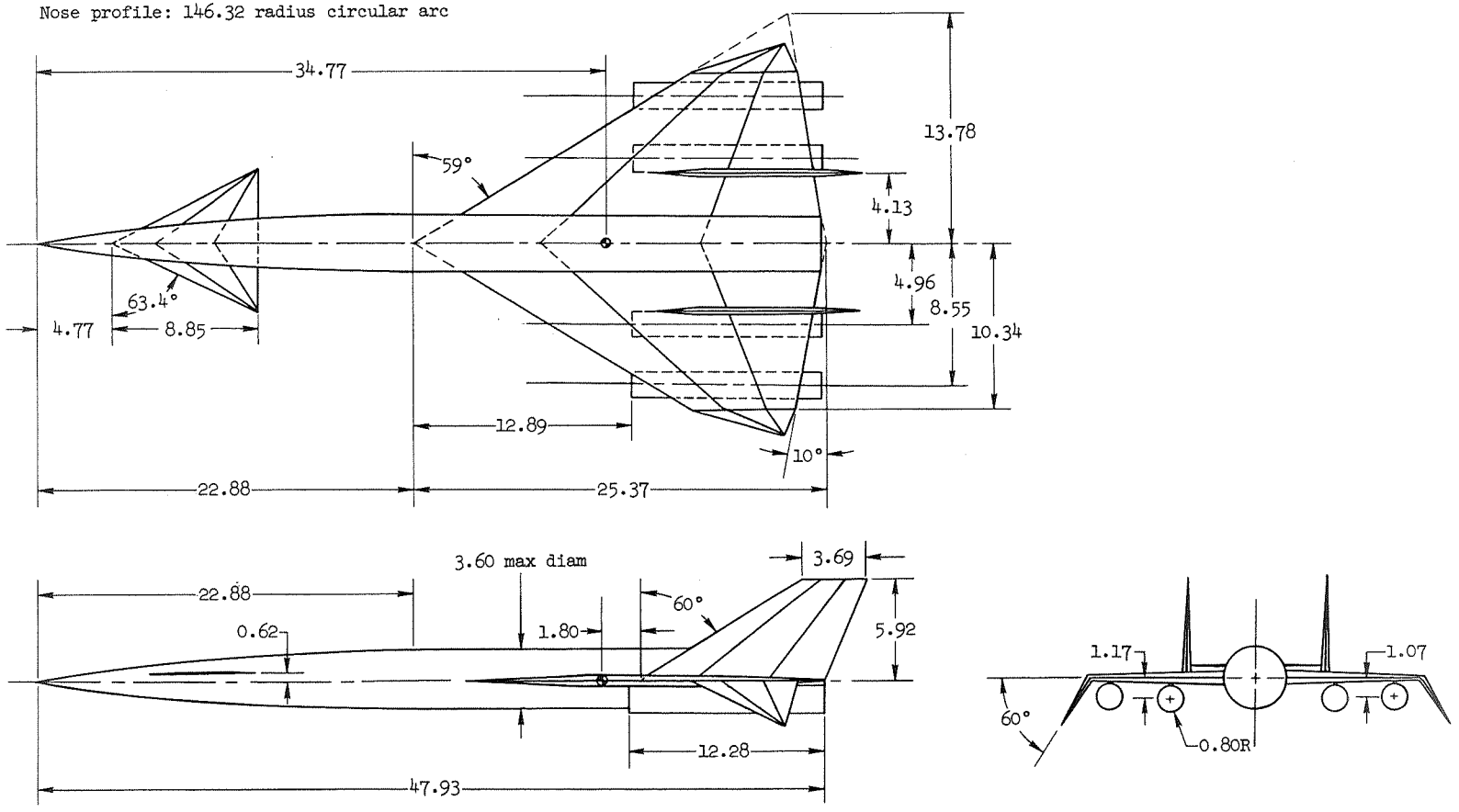




Note: All dimensions in inches
except as noted

(c) Model 3 - ($F_1W_1C_1V_1N_3$).

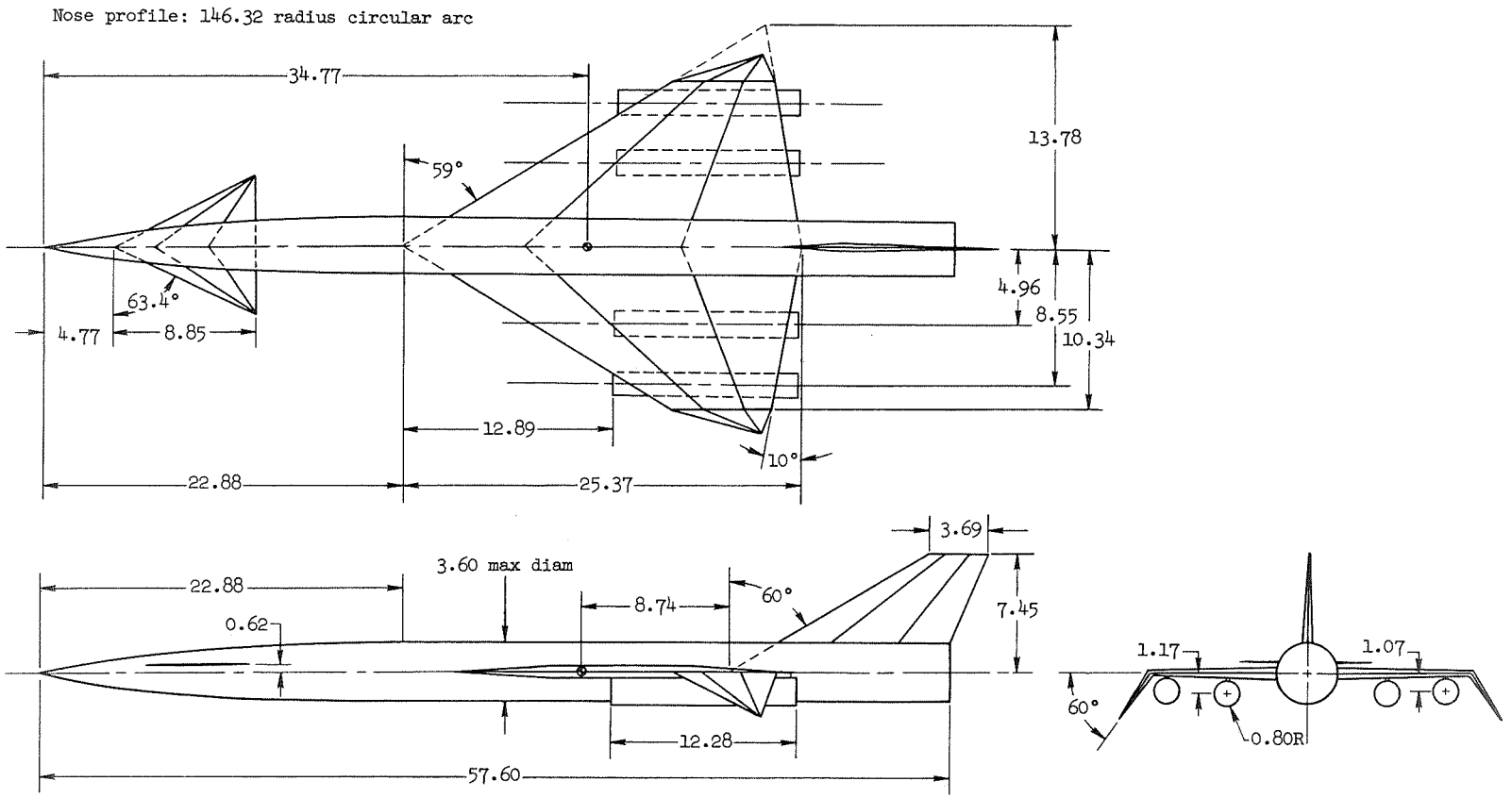
Figure 3.- Continued.



Note: All dimensions in inches
except as noted

(d) Model 4 - ($F_2W_2C_1V_2N_1$).

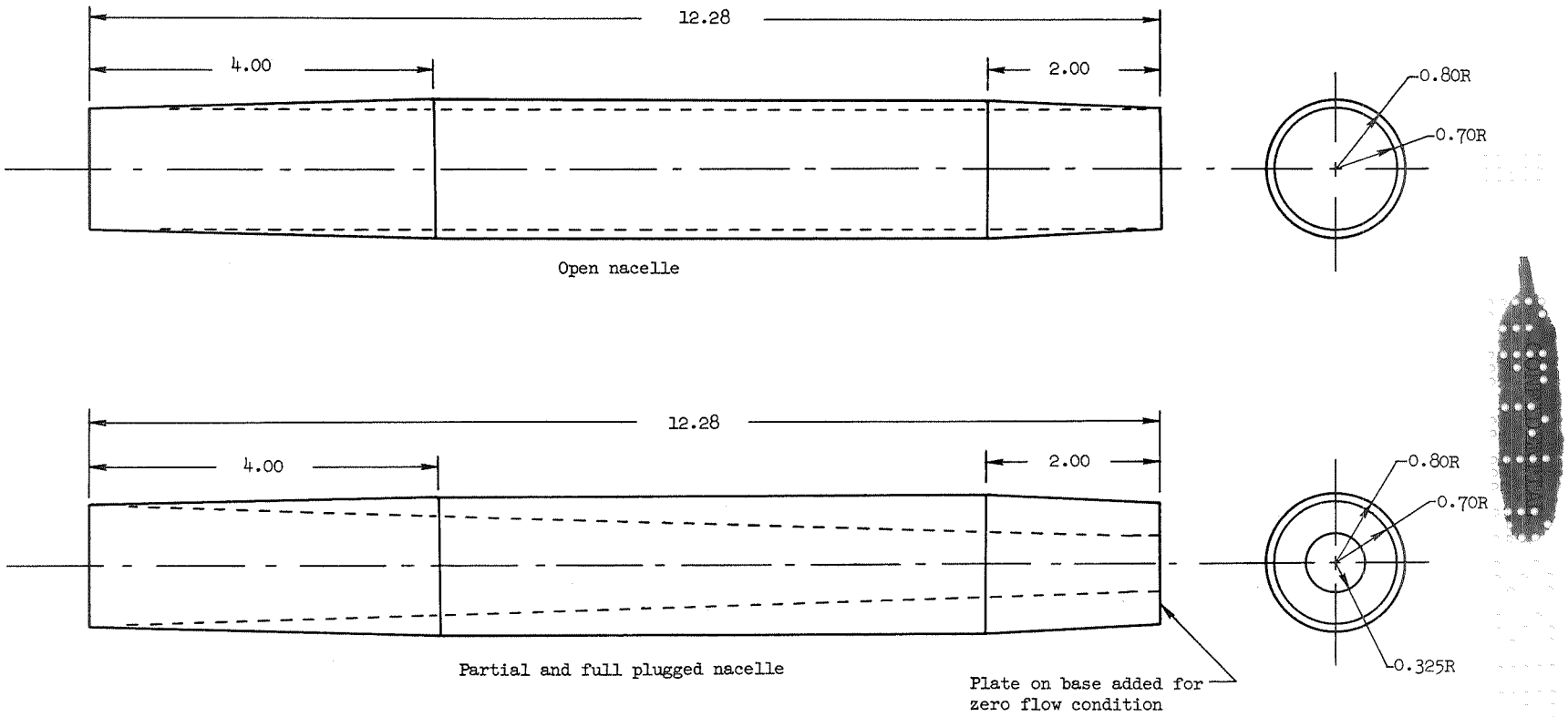
Figure 3.- Continued.



Note: All dimensions in inches
except as noted

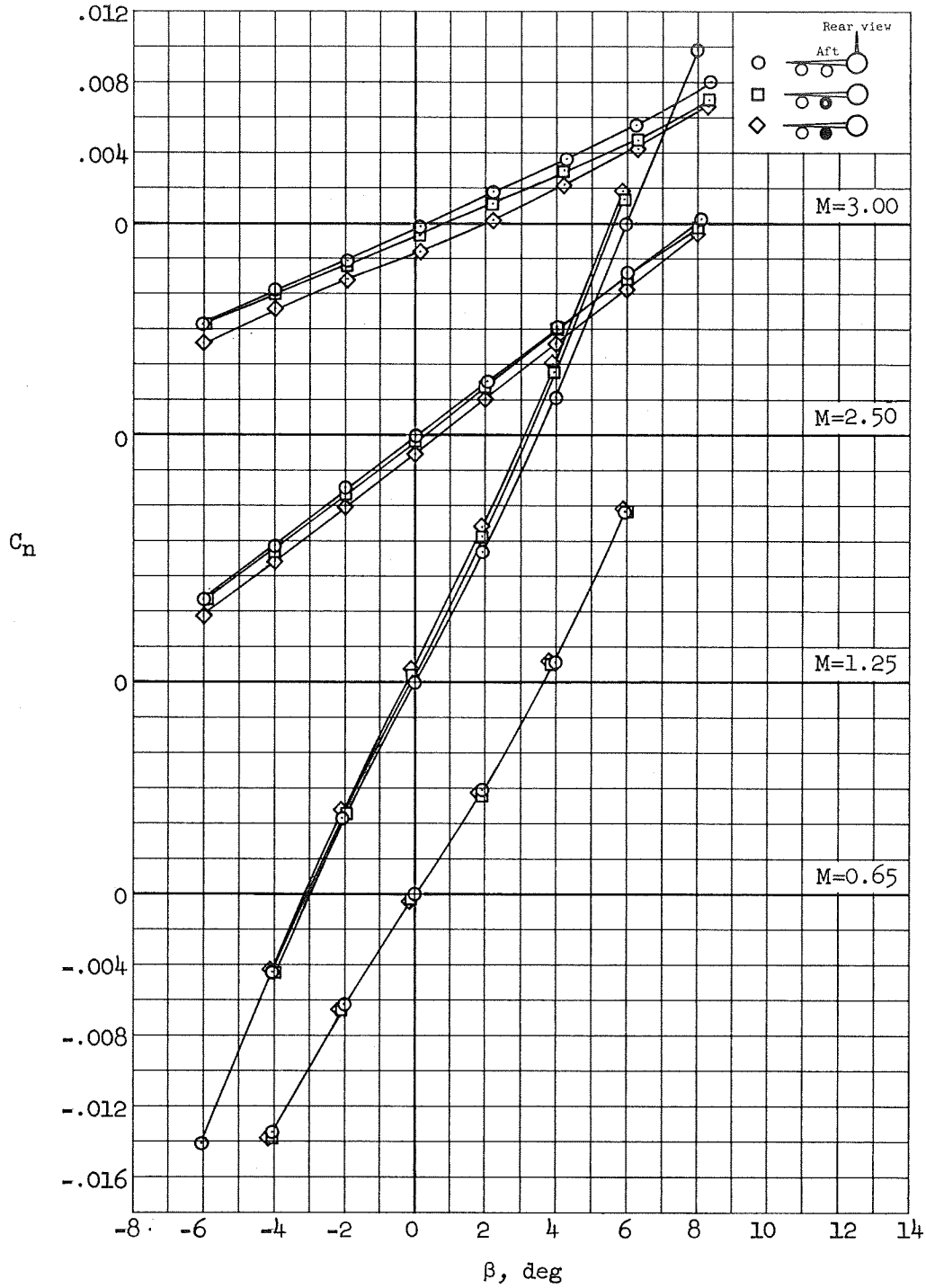
(e) Model 5 - $(F_1W_2C_1V_1N_1)$.

Figure 3.- Continued.



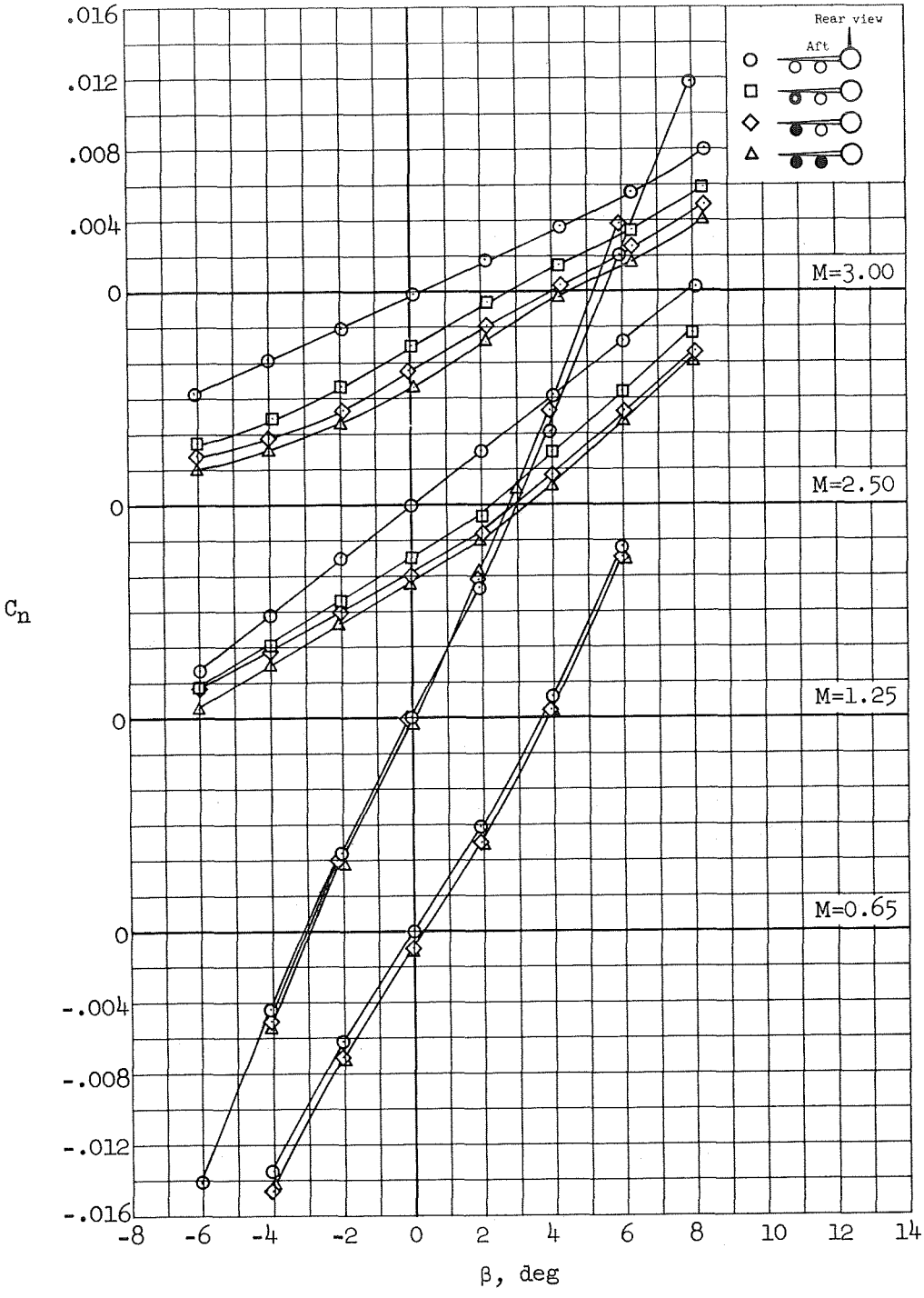
(f) Nacelle detail.

Figure 3.- Concluded.



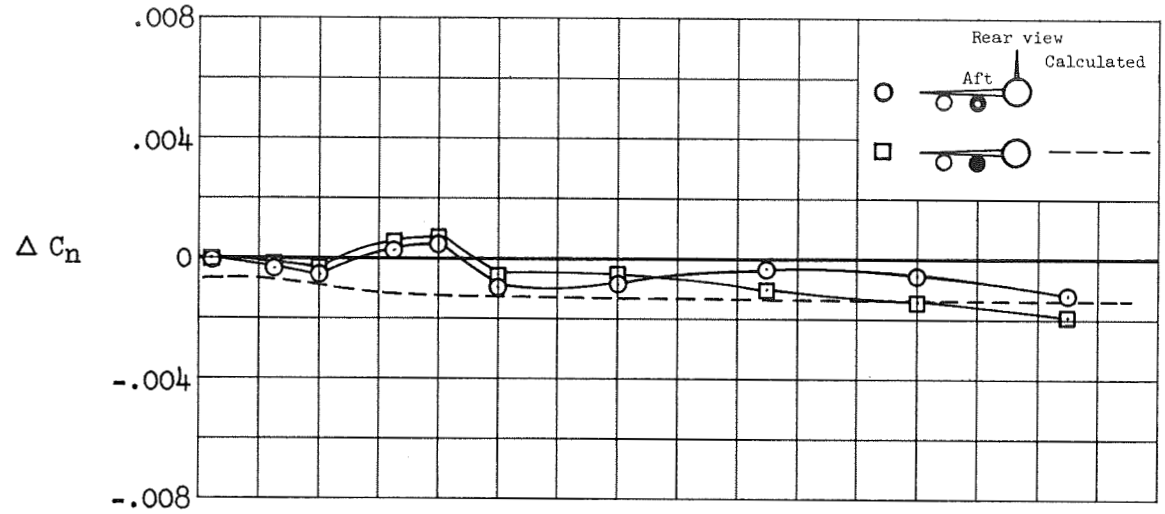
(a) Inboard nacelle.

Figure 4.- Effects of off-design inlet mass flow on directional characteristics of model 1; $\alpha \approx 3^{\circ}$.

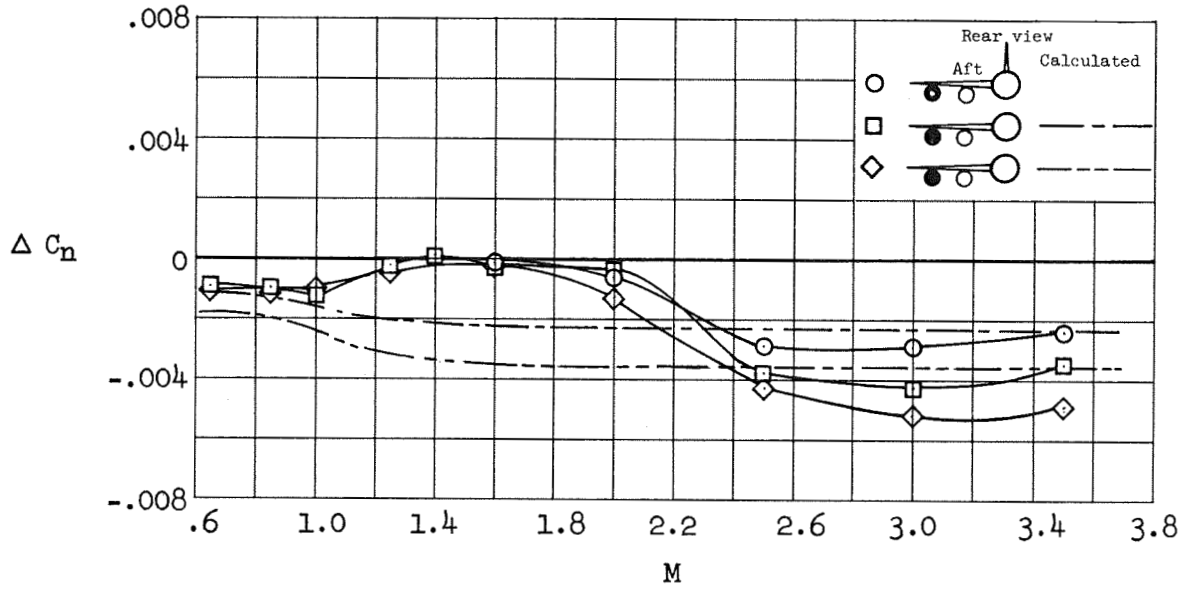


(b) Outboard nacelle and both nacelles.

Figure 4.- Concluded.

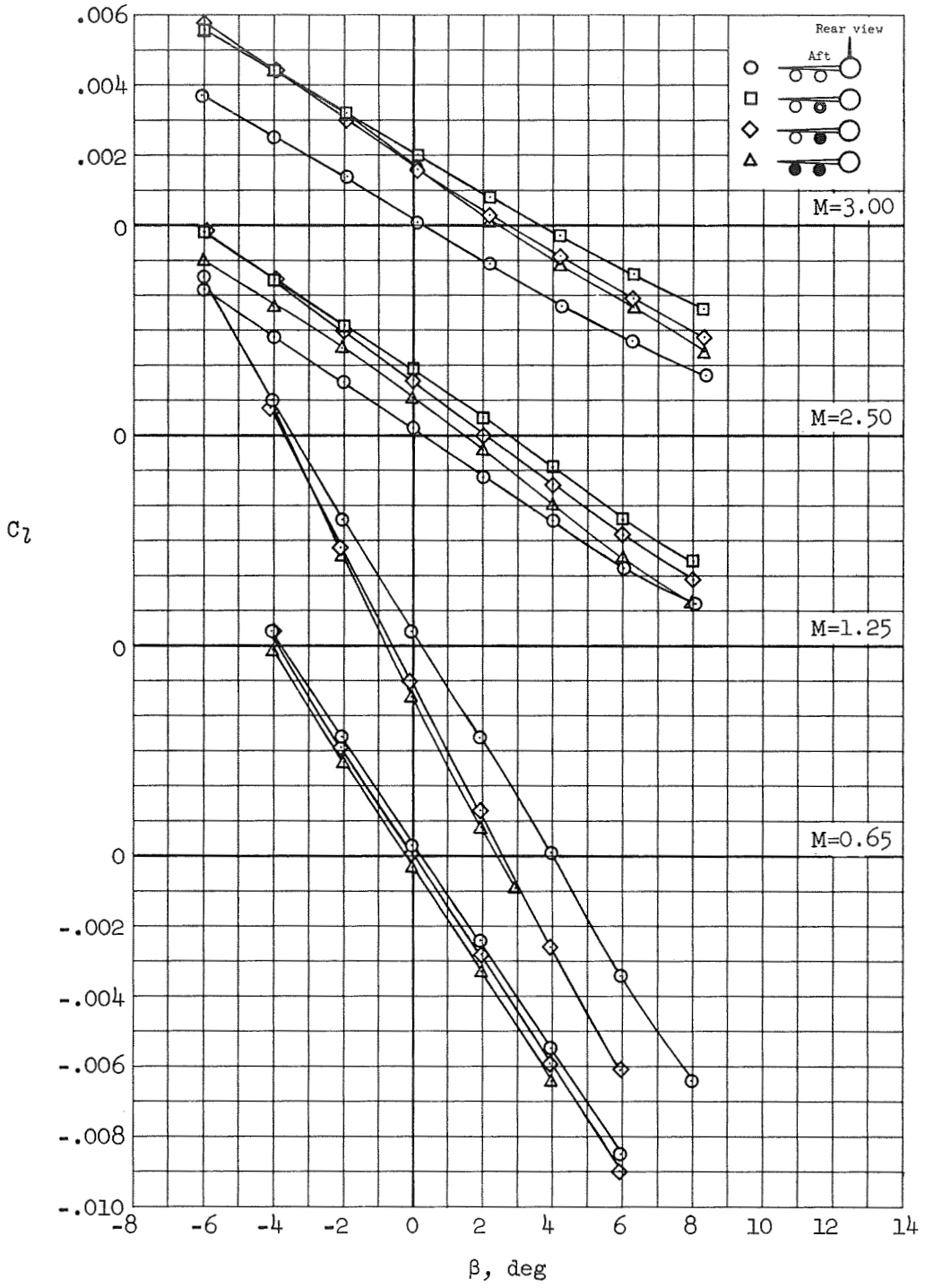


(a) Inboard nacelle.



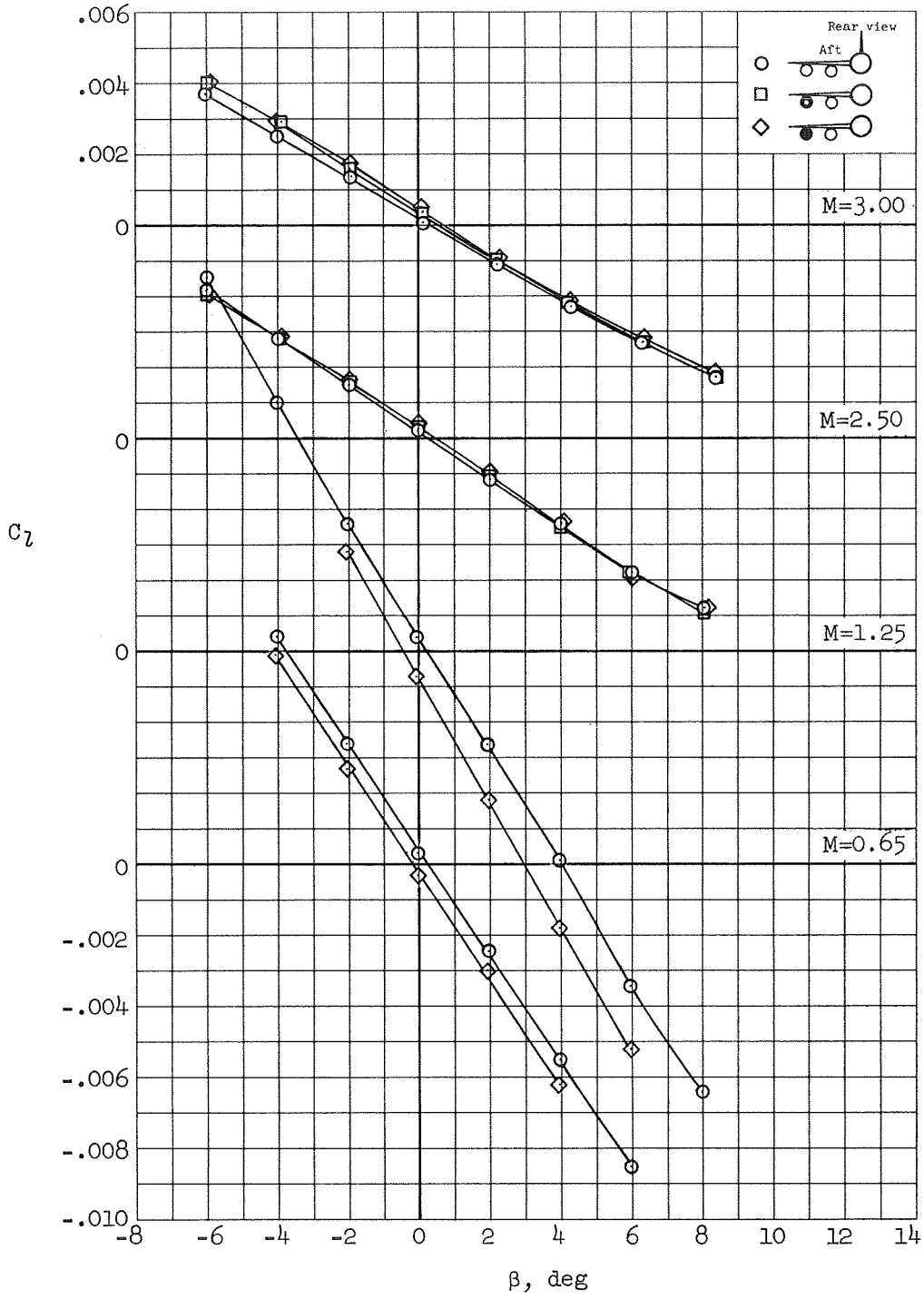
(b) Outboard nacelle and both nacelles.

Figure 5.- Incremental yawing moment resulting from off-design inlet mass flow of model 1; $\alpha \approx 3^{\circ}$, $\beta = 0^{\circ}$.



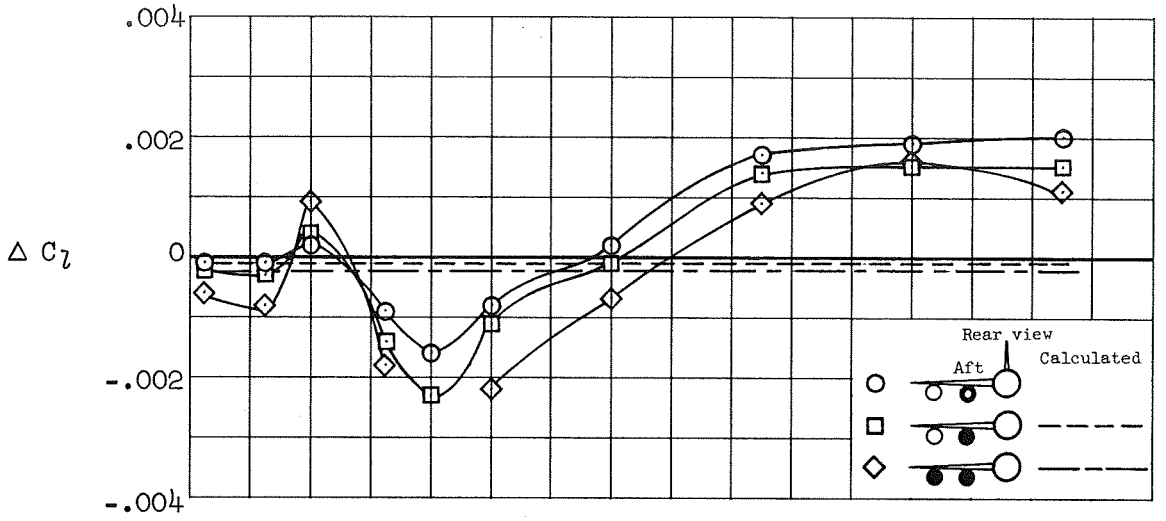
(a) Inboard nacelle and both nacelles.

Figure 6.- Effects of off-design inlet mass flow on lateral characteristics of model 1; $\alpha \approx 3^{\circ}$.

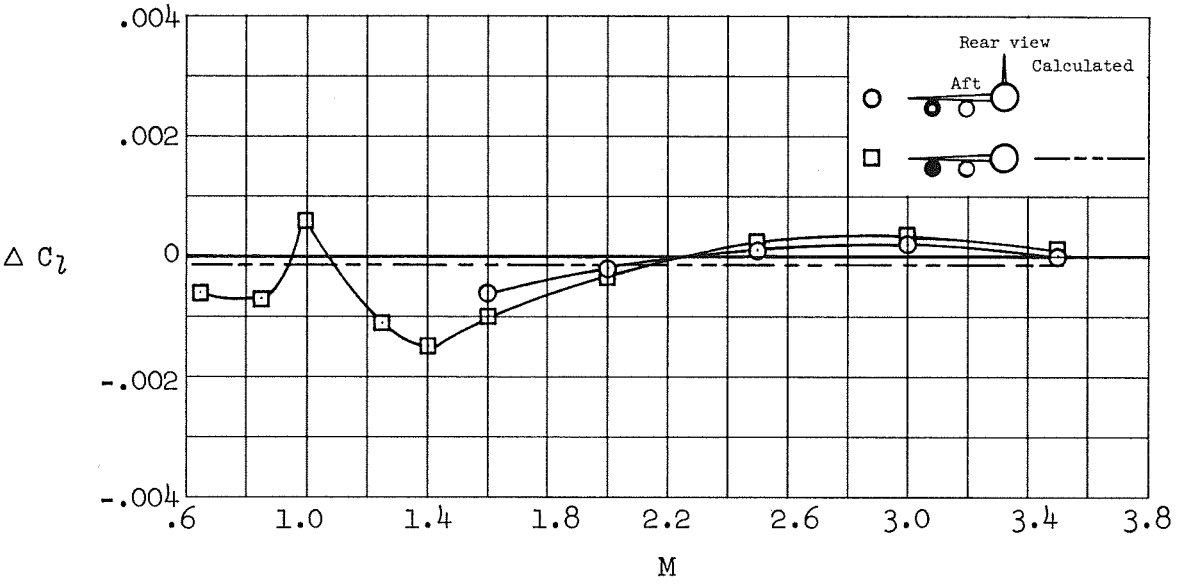


(b) Outboard nacelle.

Figure 6.- Concluded.



(a) Inboard nacelle and both nacelles.



(b) Outboard nacelle.

Figure 7.- Incremental rolling moment resulting from off-design inlet mass flow of model 1; $\alpha \approx 3^\circ$, $\beta = 0^\circ$.

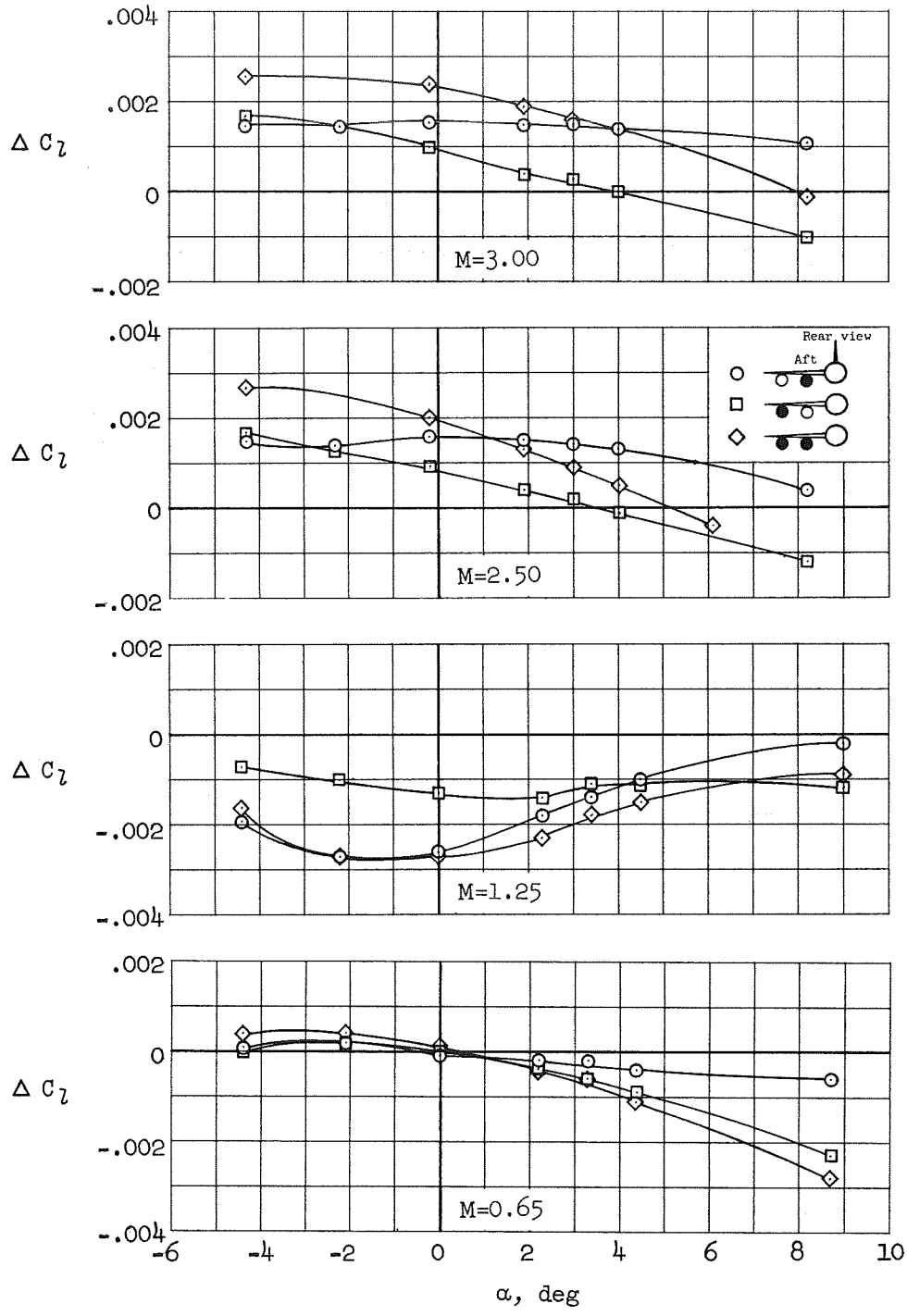
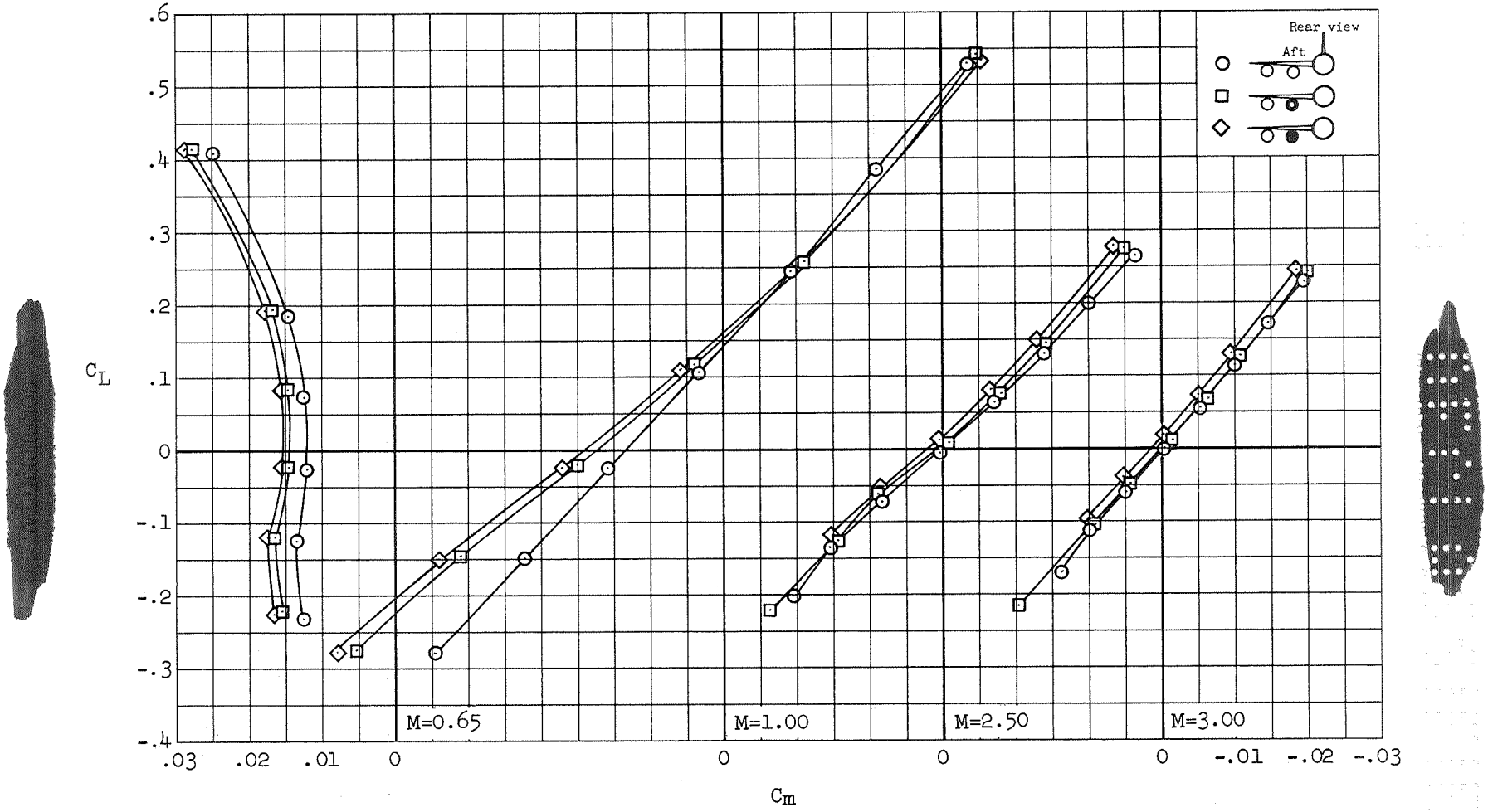
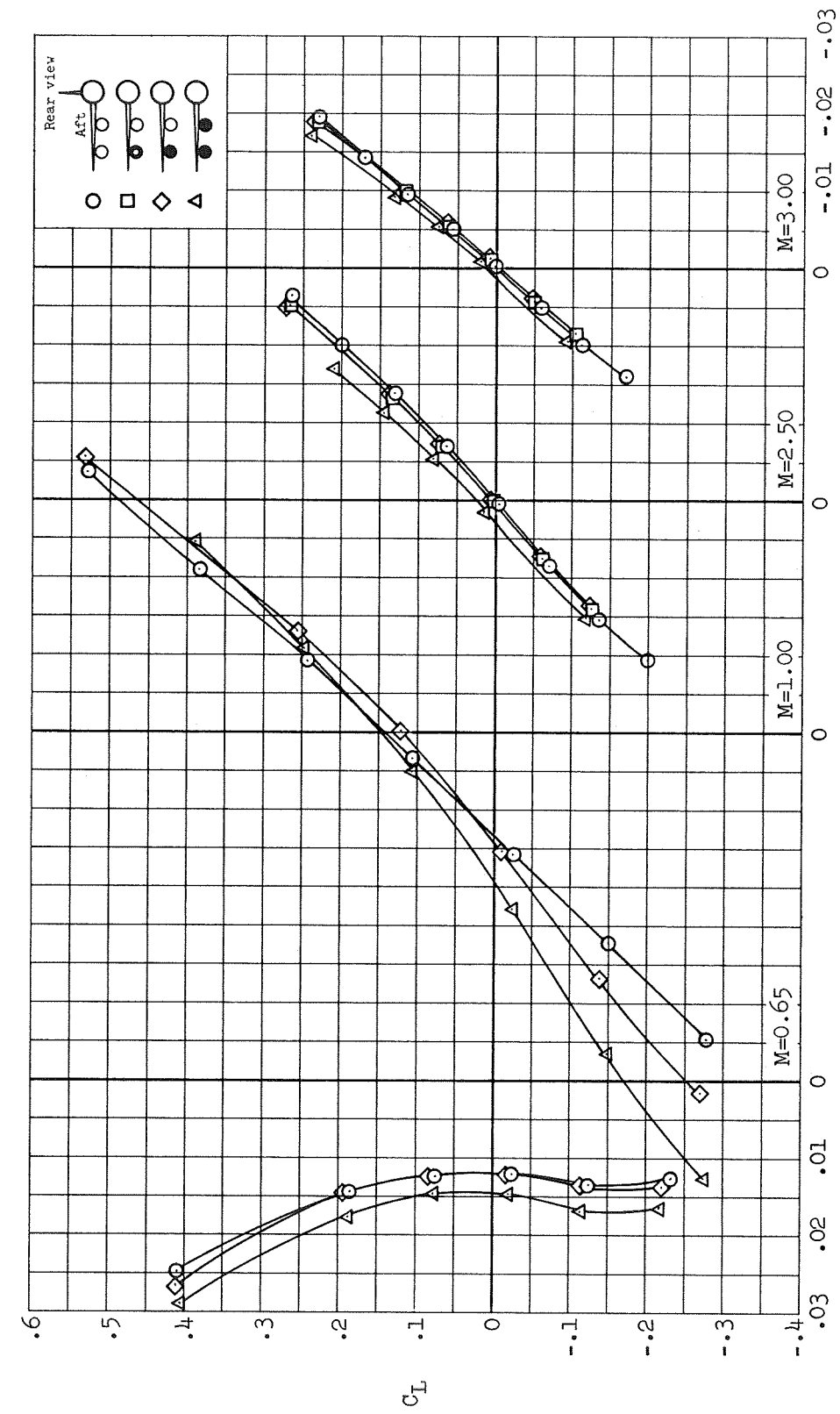


Figure 8.- Effects of angle of attack on incremental rolling moment of model 1; $\beta = 0^{o}$.



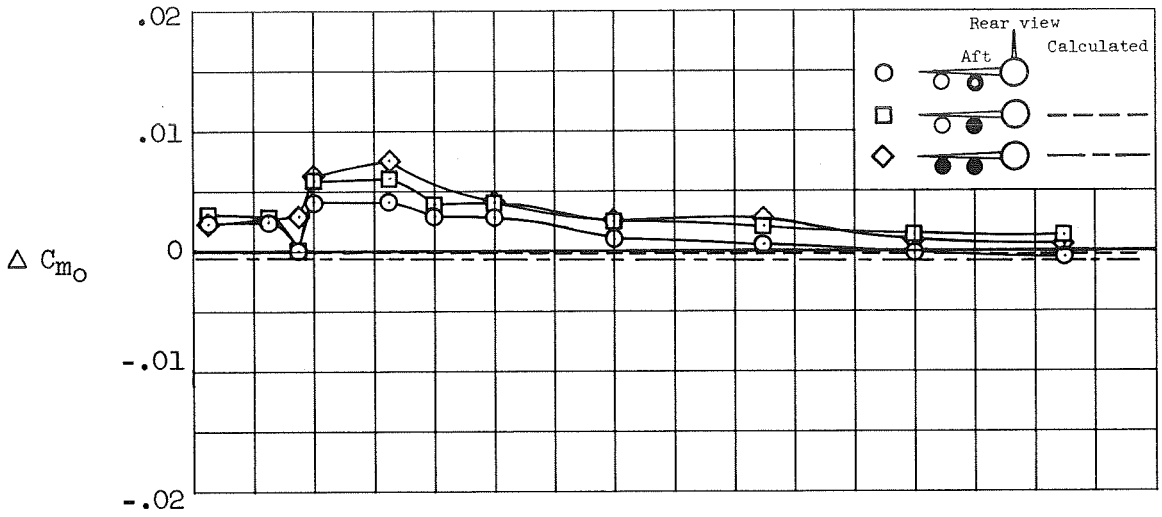
(a) Inboard nacelle.

Figure 9.- Effects of off-design inlet mass flow on pitching-moment characteristics of model 1; $\beta = 0^{o}$.

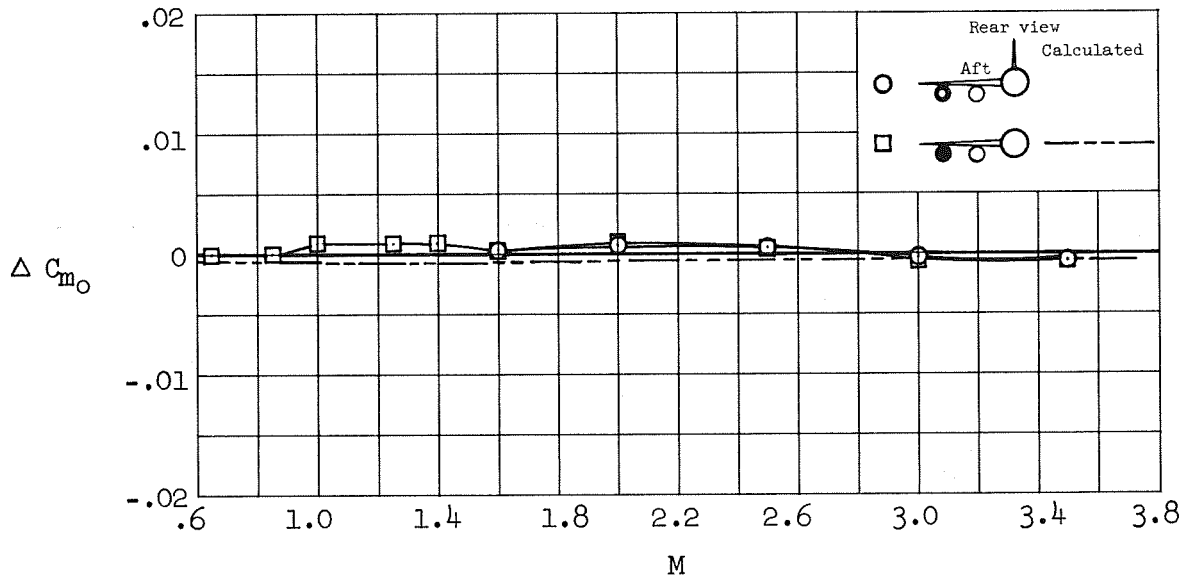


(b) Outboard nacelle and both nacelles.

Figure 9.- Concluded.

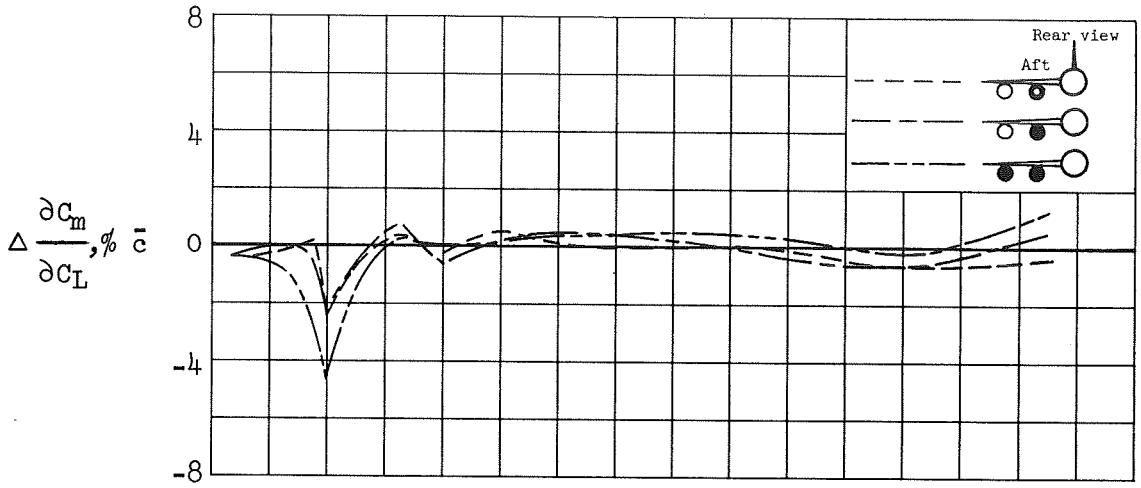


(a) Inboard nacelle and both nacelles.

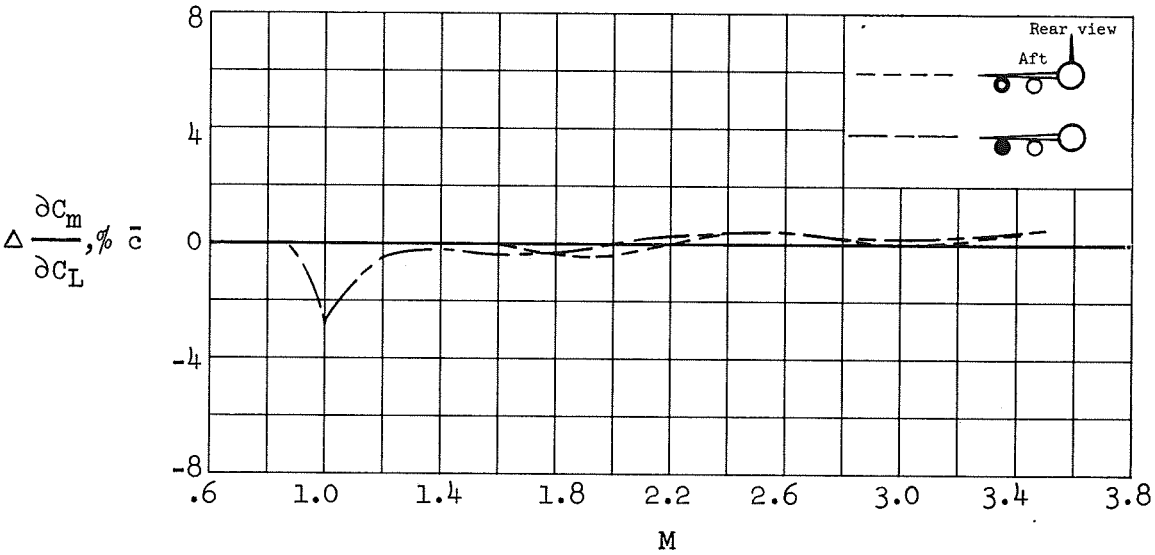


(b) Outboard nacelle.

Figure 10.- Incremental pitching moment at zero lift of model 1 as a result of reduced inlet mass flow; $\beta = 0^{\circ}$.

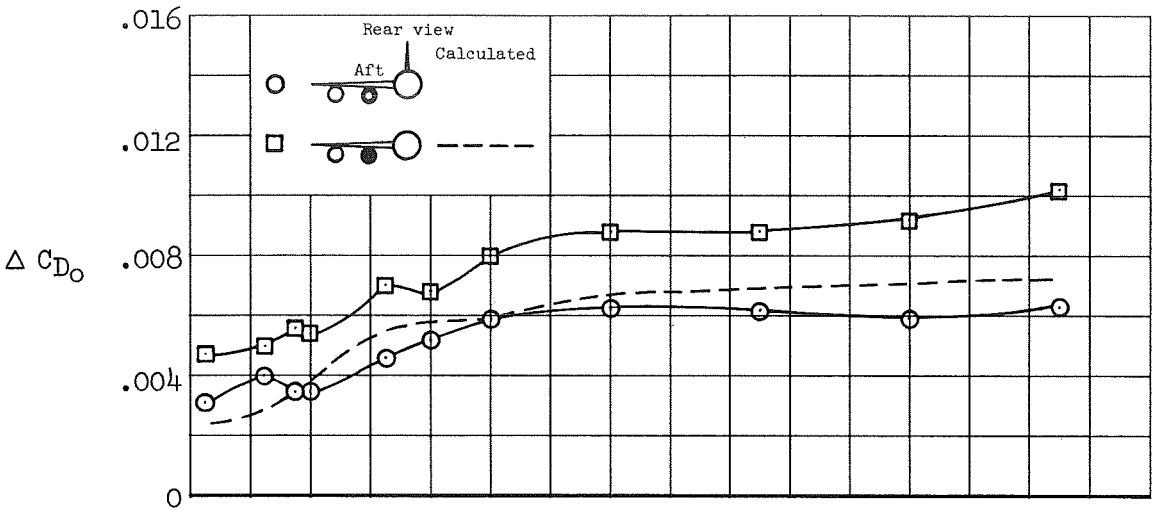


(a) Inboard nacelle and both nacelles.

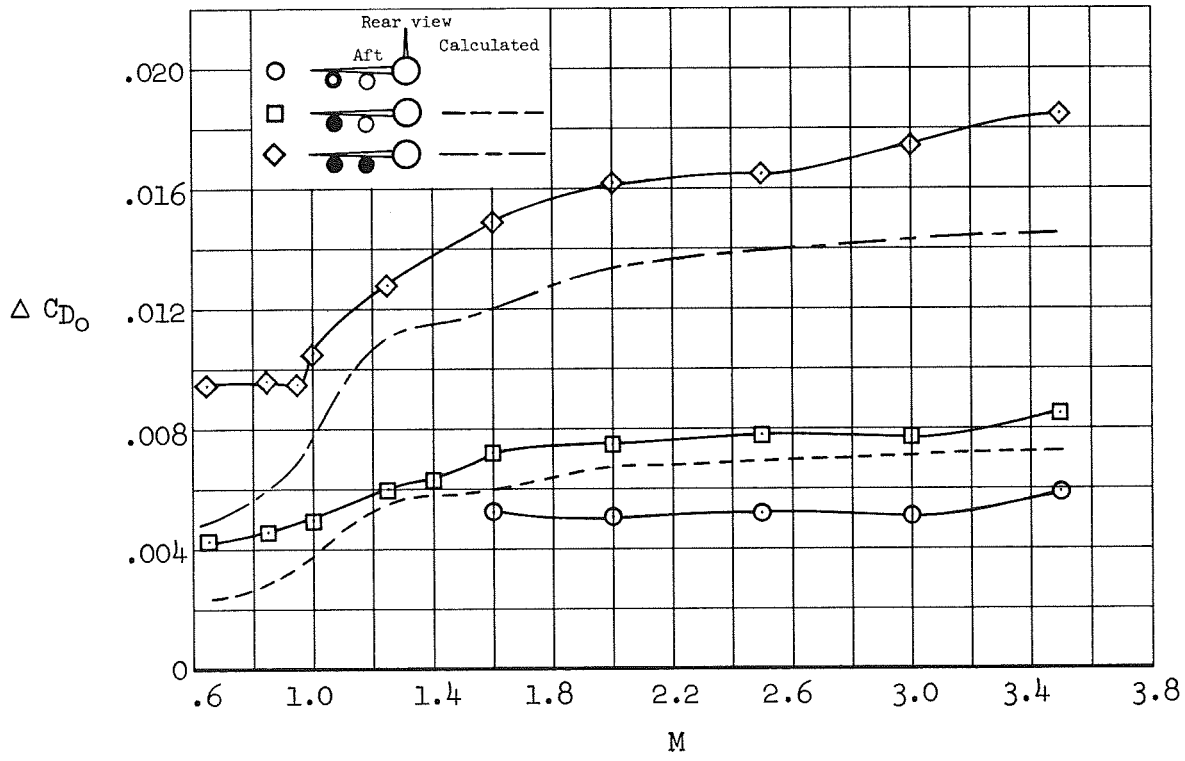


(b) Outboard nacelle.

Figure 11.- Effects of off-design inlet mass flow on longitudinal static margin of model 1; $\beta = 0^{\circ}$.

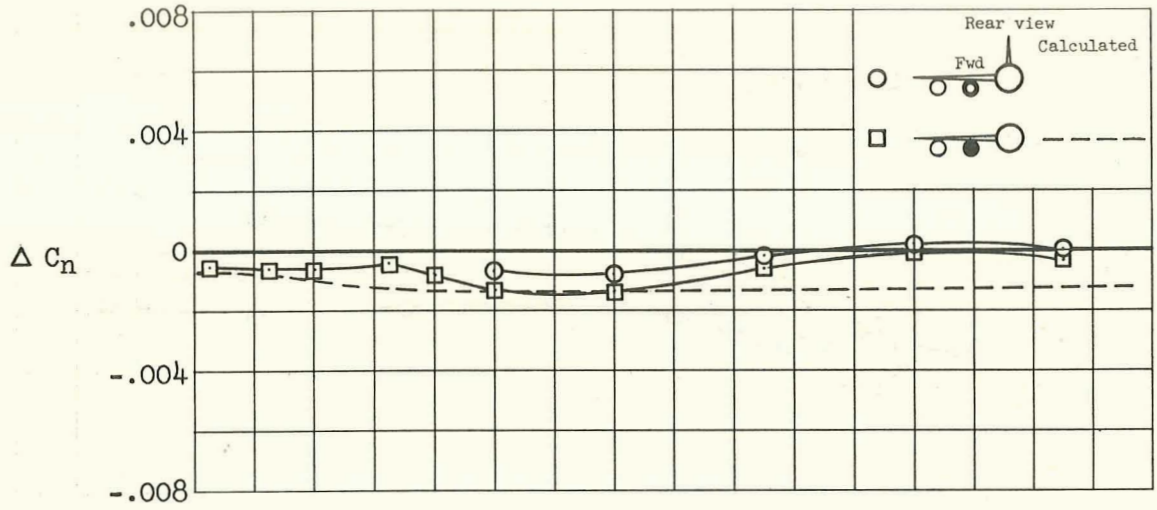


(a) Inboard nacelle.

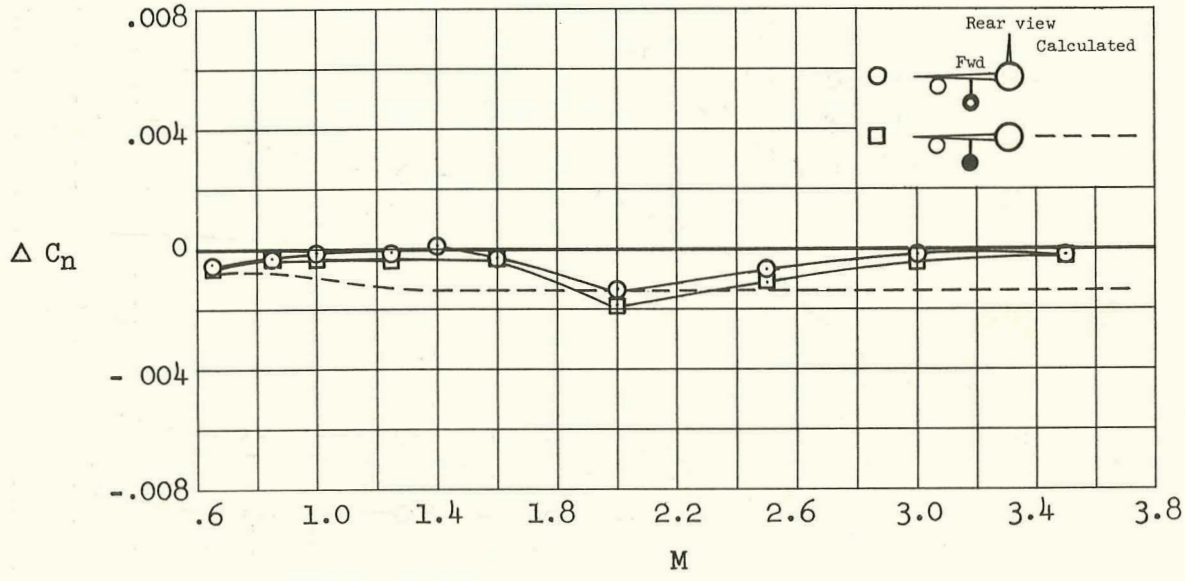


(b) Outboard nacelle and both nacelles.

Figure 12.- Incremental drag at zero lift of model 1 as a result of reduced inlet mass flow; $\beta = 0^{\circ}$.

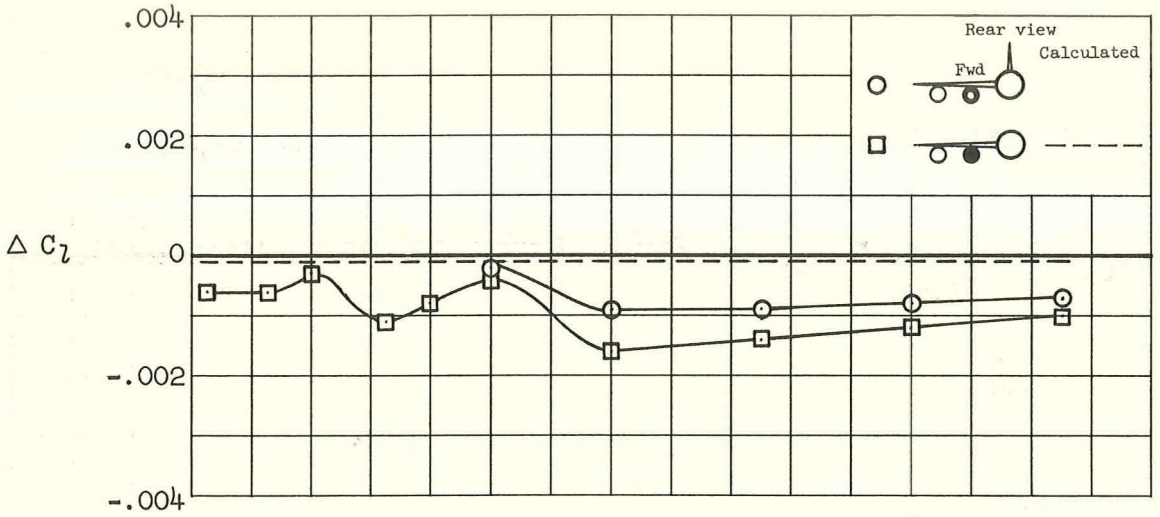


(a) Model 2, inboard nacelle.

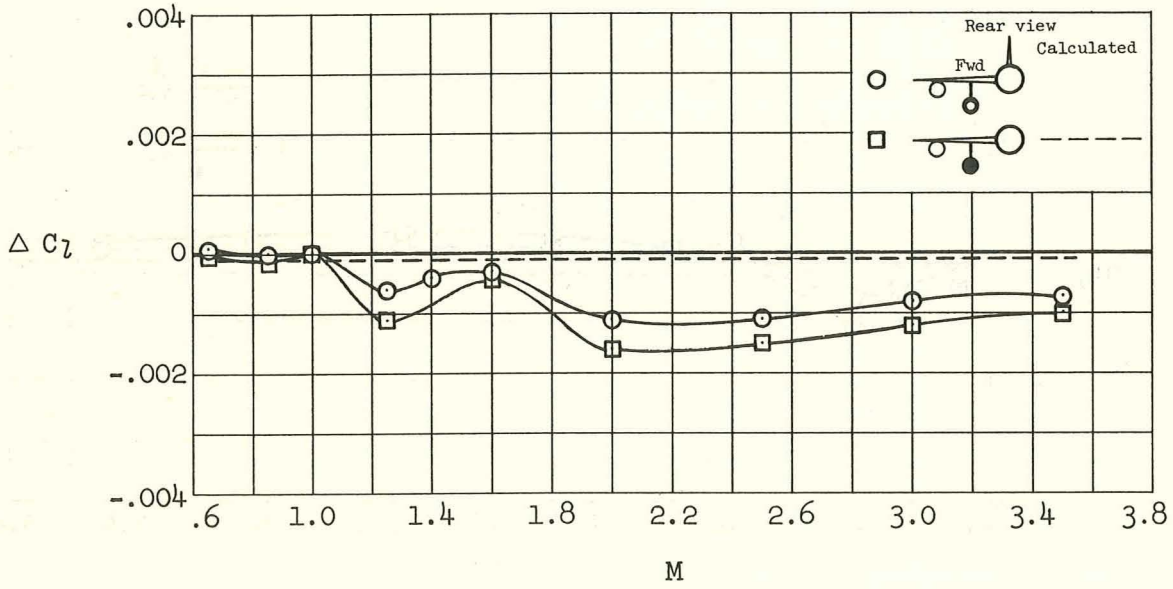


(b) Model 3, inboard nacelle.

Figure 13.- Incremental yawing moments resulting from reduced inlet mass flow of models 2 and 3; $\alpha \approx 3^{\circ}$, $\beta = 0^{\circ}$.

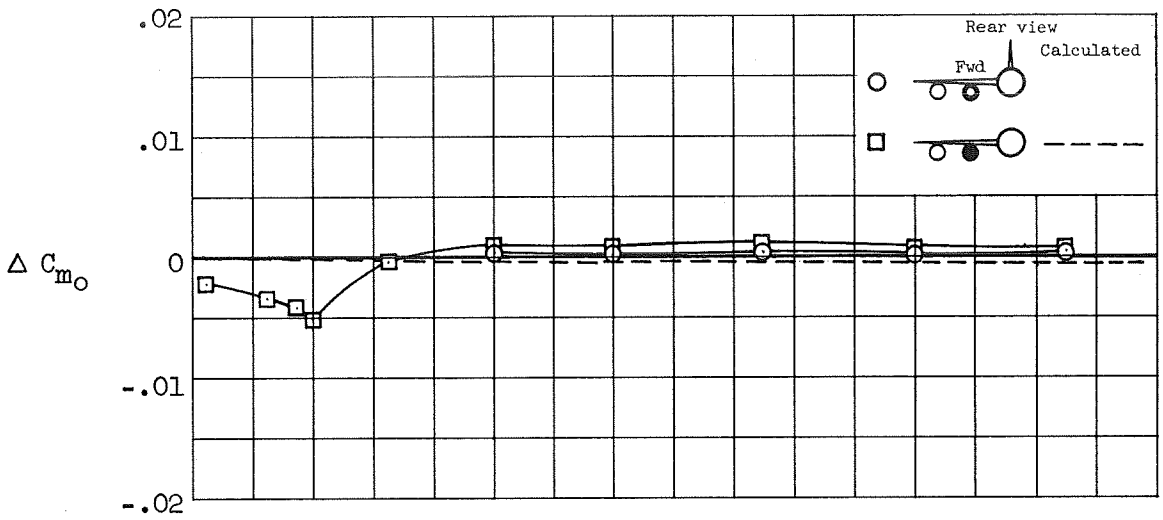


(a) Model 2, inboard nacelle.

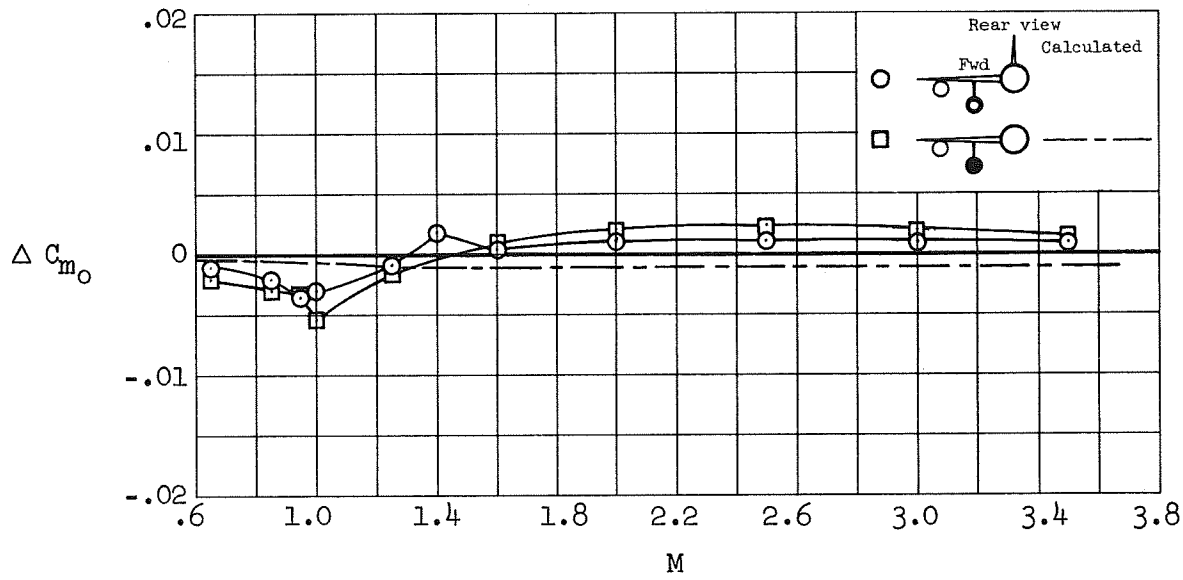


(b) Model 3, inboard nacelle.

Figure 14.- Incremental rolling moments produced by off-design inlet mass flow of models 2 and 3; $\alpha \approx 3^\circ$, $\beta = 0^\circ$.

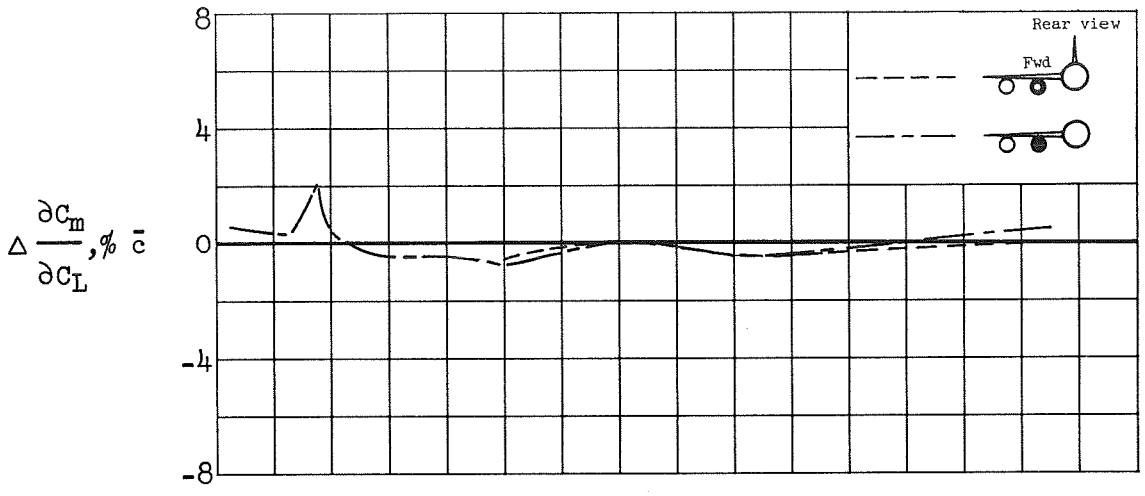


(a) Model 2, inboard nacelle.

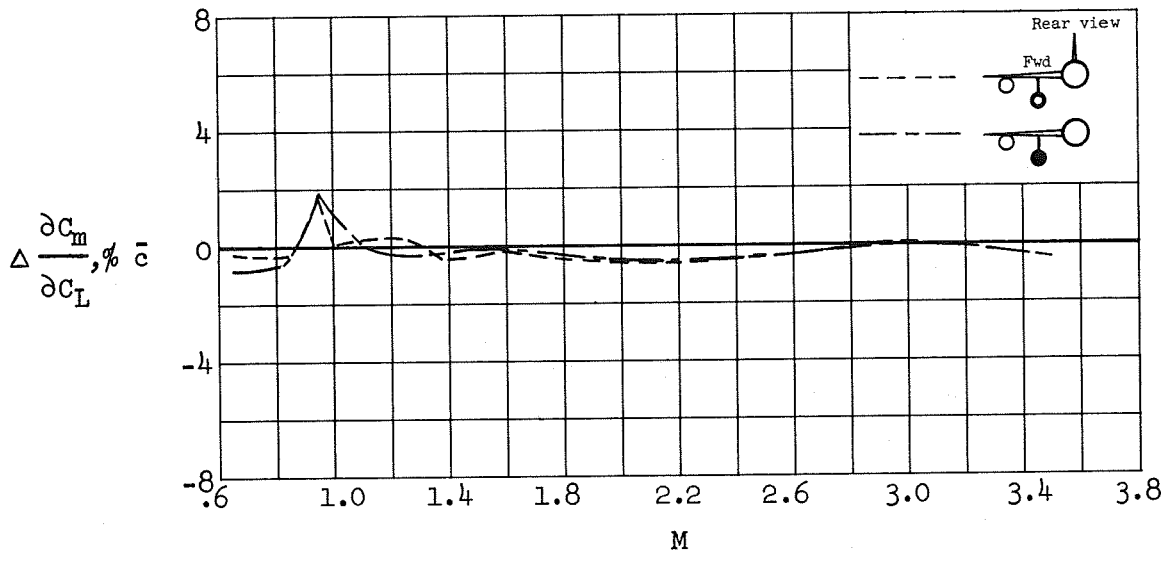


(b) Model 3, inboard nacelle.

Figure 15.- Incremental pitching moment at zero lift produced by reduced inlet mass flow of models 2 and 3; $\beta = 0^{\circ}$.

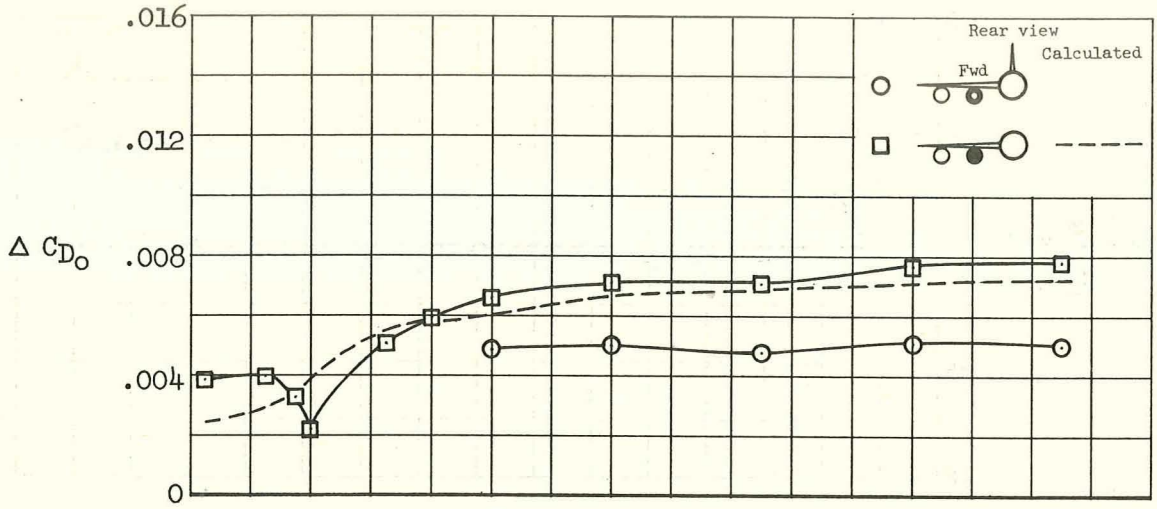


(a) Model 2, inboard nacelle.

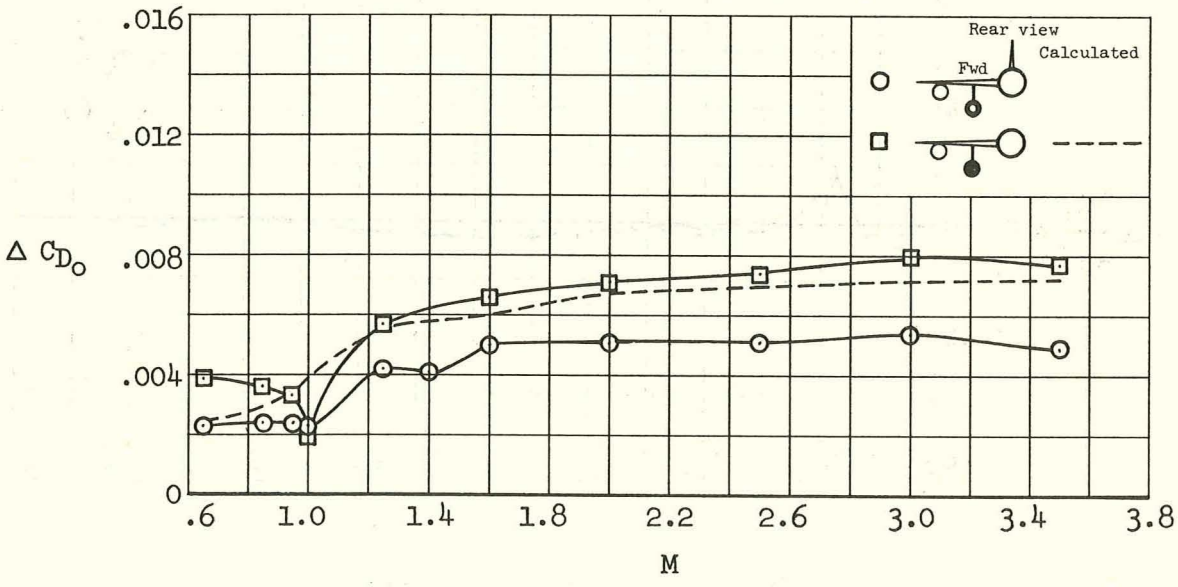


(b) Model 3, inboard nacelle.

Figure 16.- Effects of reduced inlet mass flow on longitudinal static margin of models 2 and 3; $\beta = 0^{\circ}$.



(a) Model 2, inboard nacelle.



(b) Model 3, inboard nacelle.

Figure 17.- Incremental drag at zero lift of models 2 and 3 as a result of reduced inlet mass flow; $\beta = 0^{\circ}$.

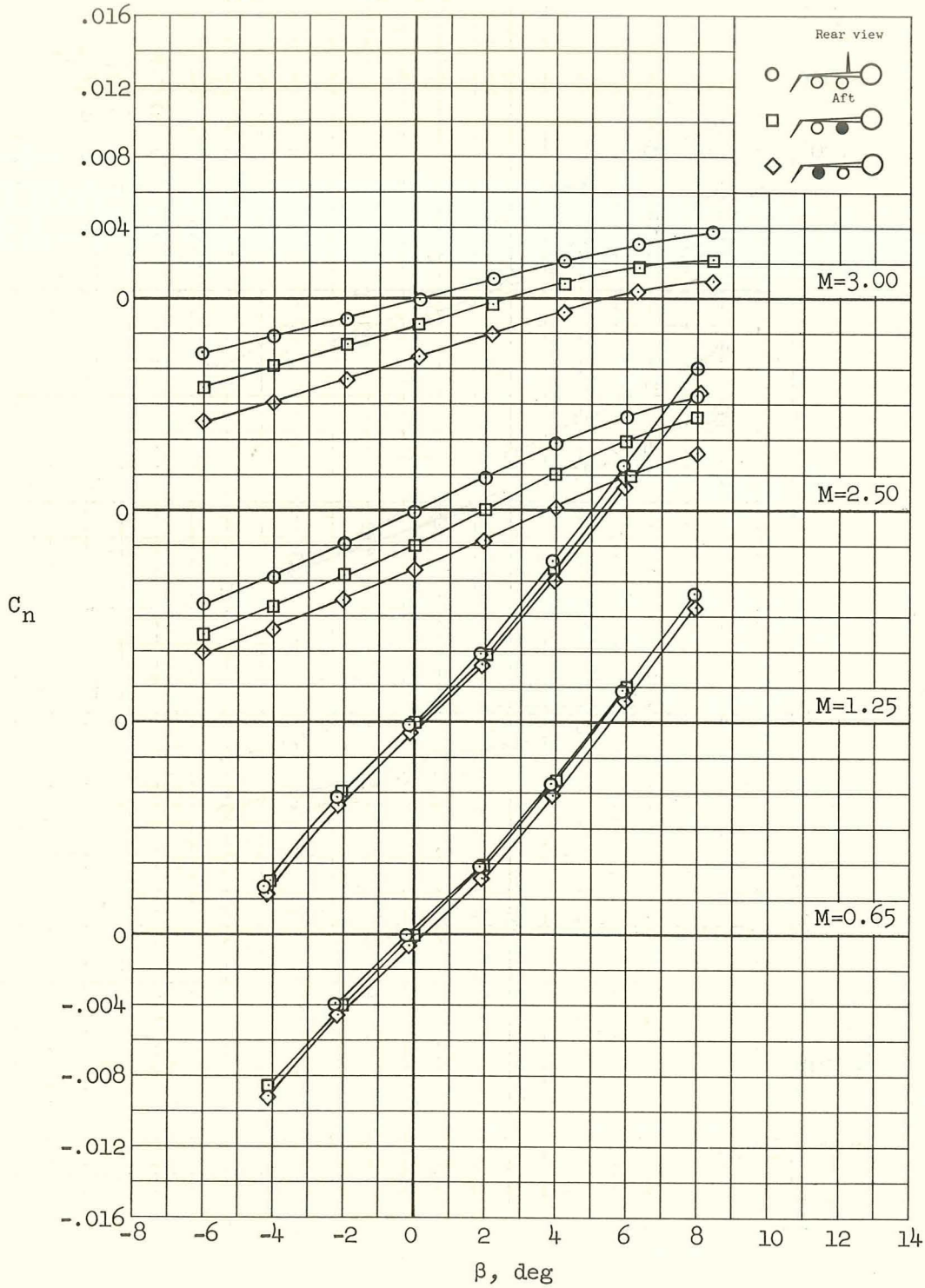


Figure 18.- Effects of off-design inlet mass flow on directional characteristics of model 4; $\alpha \approx 3^{\circ}$.

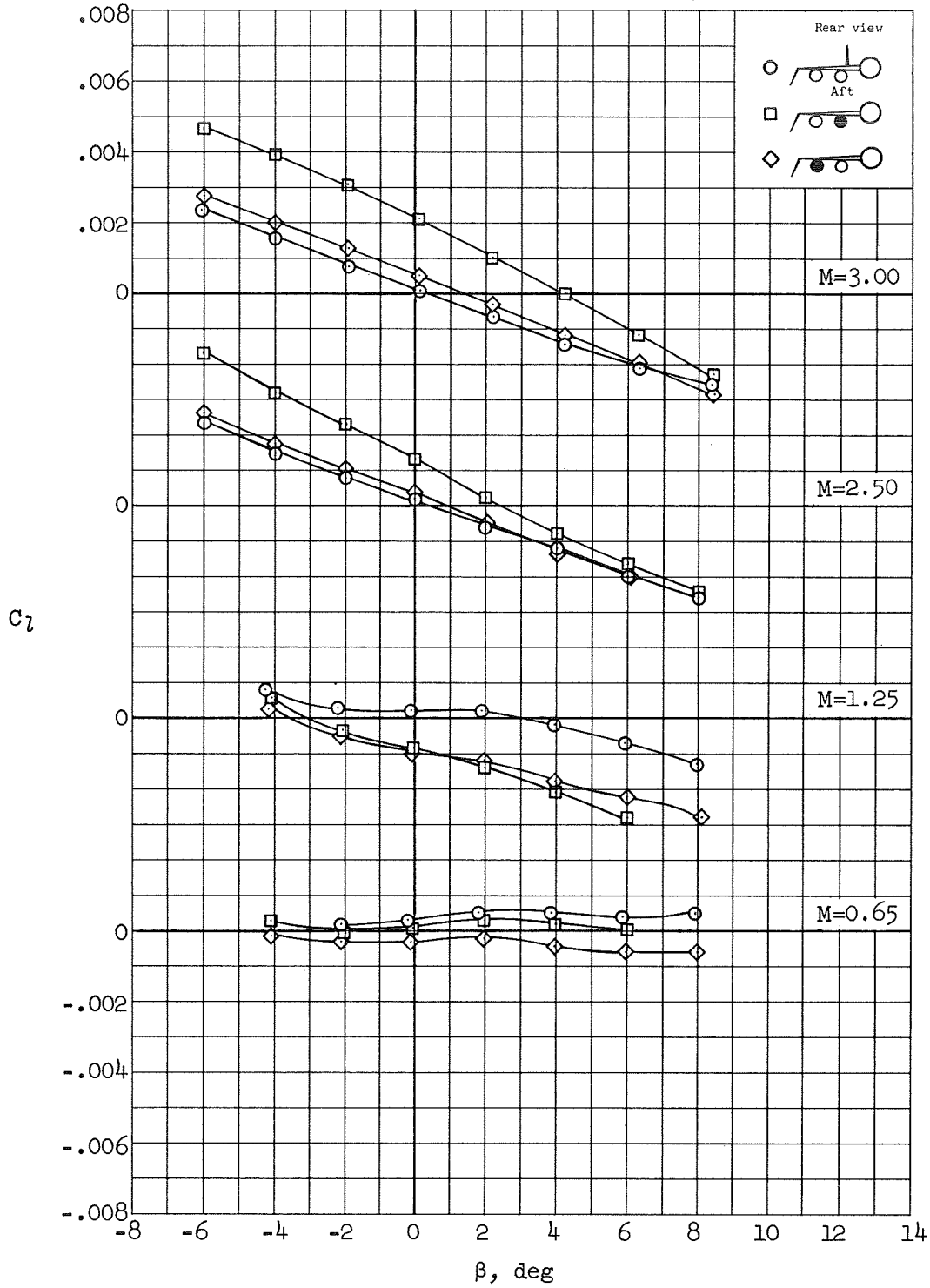
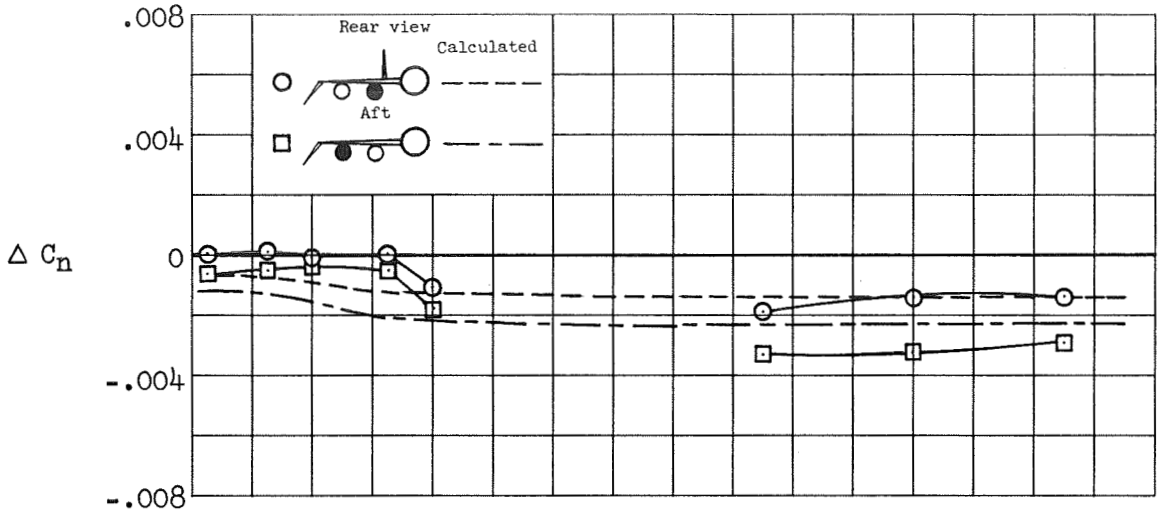
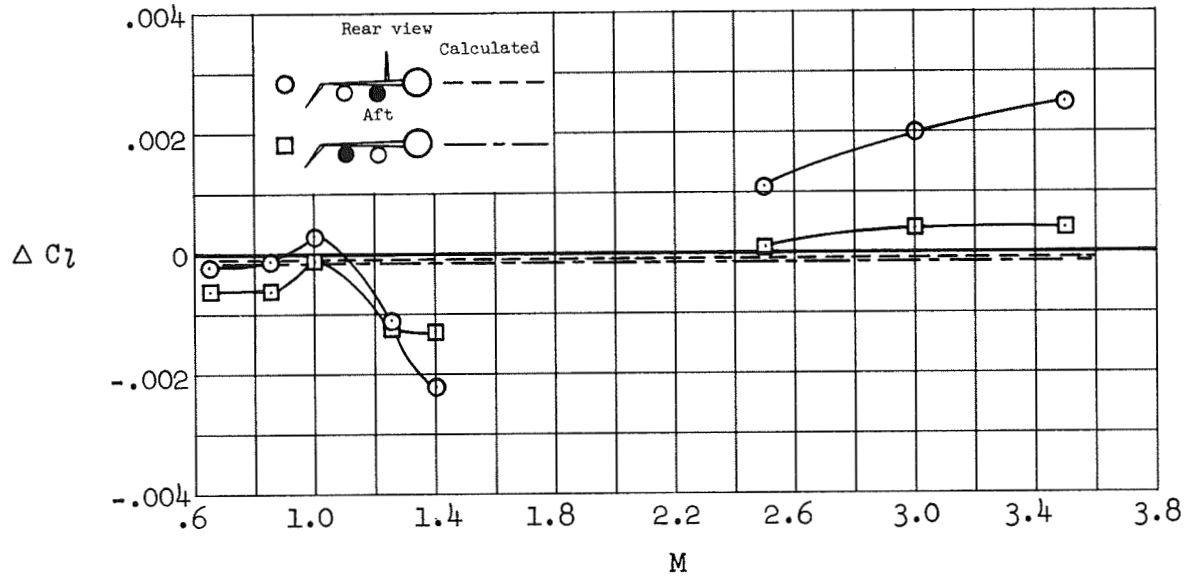


Figure 19.- Effects of off-design inlet mass flow on lateral characteristics of model 4; a ≈ 3°.



(a) Incremental yawing moments.



(b) Incremental rolling moments.

Figure 20.- Summary of effects of off-design inlet mass flow on directional characteristics of model 4; $\alpha \approx 3^{\circ}$, $\beta = 0^{\circ}$.

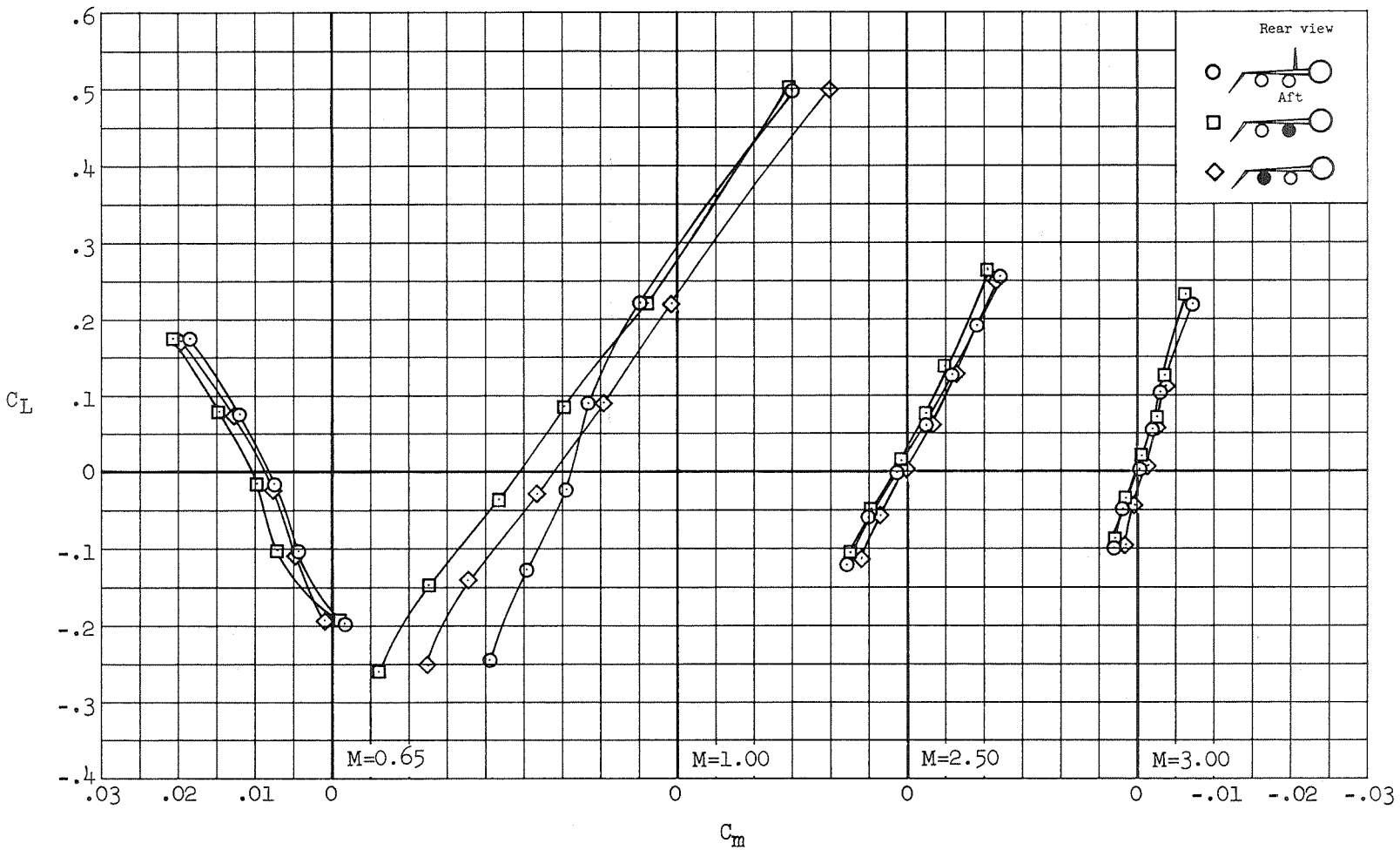
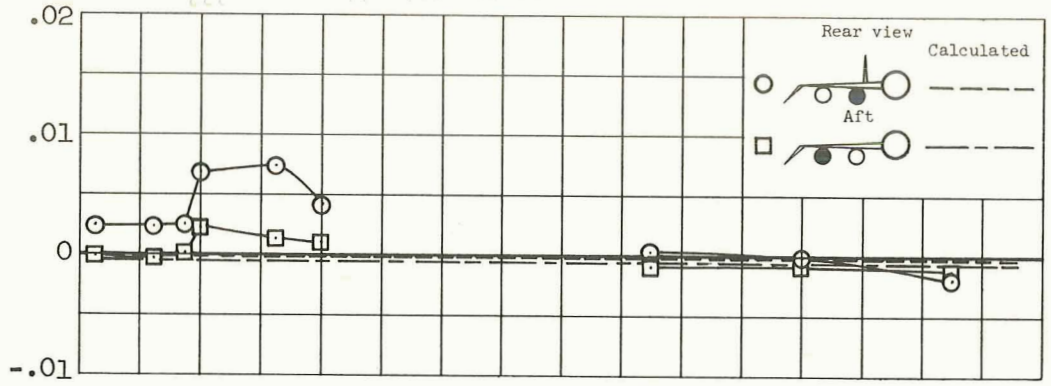
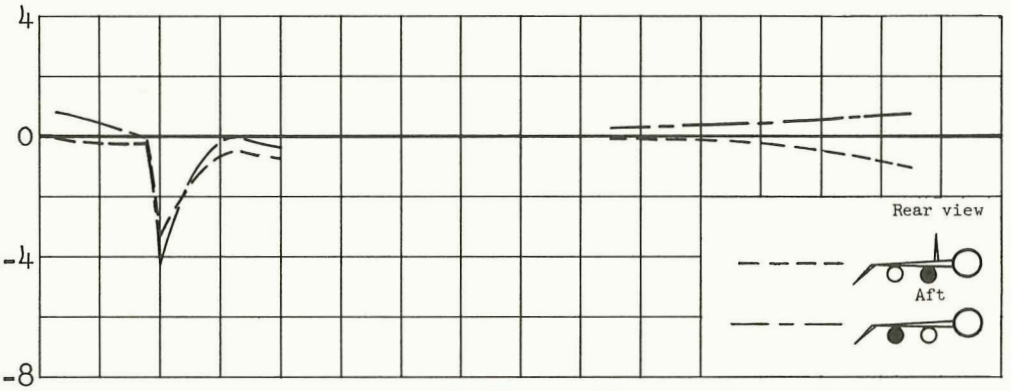


Figure 21.- Effects of off-design inlet mass flow on pitching-moment characteristics of model 4; $\beta = 0^{\circ}$.



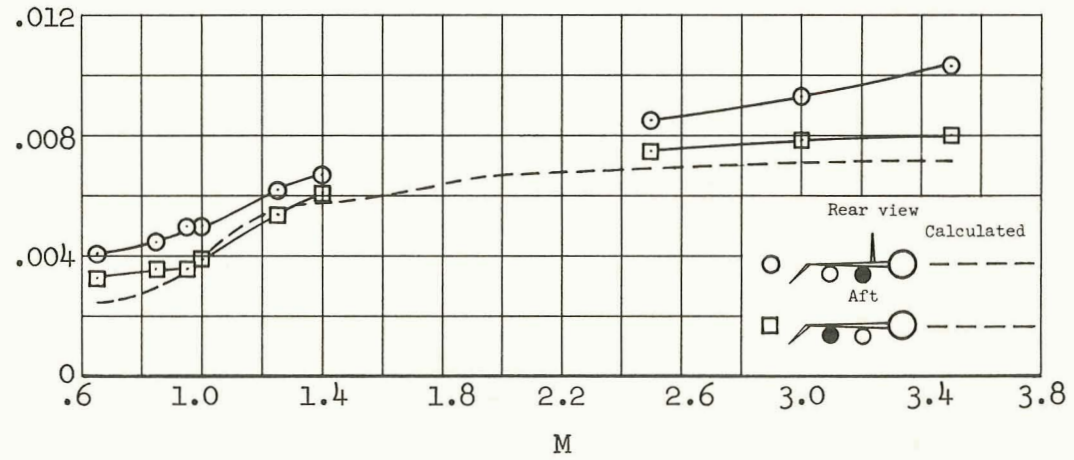
ΔC_{m_o}

(a) Incremental pitching moment at zero lift.



$\Delta \frac{\partial C_m}{\partial C_L}, \% \bar{c}$

(b) Longitudinal static margin variation.



ΔC_{D_o}

(c) Incremental drag at zero lift.

Figure 22.- Summary of effects of off-design inlet mass flow on longitudinal characteristics of model 4; $\beta = 0^o$.